

1. EXISTING PIPING AND EQUIPMENT TO REMAIN IS SHOWN LIGHT. NEW PIPING AND EQUIPMENT IS SHOWN HEAVY. EXISTING PIPING AND EQUIPMENT TO BE REMOVED IS SHOWN DASHED.
2. ARCHITECTURAL DRAWINGS SHALL BE REVIEWED FOR PROJECT SCOPE AND AREA OF WORK. WORK SHALL INCLUDE DEMOLITION AND REMOVAL OF EXISTING PLUMBING FIXTURES AS REQUIRED. PLUMBING IN EXISTING WALLS AND UNDER GROUND SHALL BE REMOVED AND CAPPED AS REQUIRED. RECONNECT EXISTING PIPING TO FIXTURES AND EQUIPMENT NOT IN DEMOLITION AREA AS REQUIRED TO MAINTAIN A COMPLETE AND OPERABLE SYSTEM.
3. THE OWNER RESERVES FIRST CHOICE TO KEEP EXISTING EQUIPMENT AND MATERIALS. COORDINATE WITH OWNER AND DELIVER DESIGNATED EQUIPMENT AND MATERIALS REMOVED UNDER THIS CONTRACT TO OWNERS DESIGNATED STORAGE AREA.
4. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT PLUMBING FIXTURE LOCATIONS, MOUNTING HEIGHTS, AND PLUMBING ROUGH-IN LOCATIONS. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, ALL HANDICAPPED FIXTURES. OBTAIN EXACT FLOOR DRAIN AND FLOOR SINK LOCATIONS FROM FOOD SERVICE DRAWINGS. ROUGH-IN LOCATIONS FOR KITCHENS, BARS, ETC. TO BE TAKEN FROM APPROVED FOOD SERVICE SHOP DRAWINGS.
5. ITEM DESIGNATIONS INDICATED ARE FOR PURPOSES OF THESE DOCUMENTS ONLY. CONTRACTOR SHALL VERIFY WITH OWNER ACTUAL DESIGNATION INFORMATION TO BE PROVIDED FOR EACH ITEM OF PLUMBING EQUIPMENT PRIOR TO NAMEPLATE ORDER RELEASE.
6. THE PLUMBING DETAILS SHALL BE CONSIDERED AS A PART OF THE CONTRACT DOCUMENTS. THESE DETAILS SHALL BE INCORPORATED INTO THE ASSOCIATED WORK AND PROVIDE GENERAL GUIDANCE AS TO THE INSTALLATION INTENT WHETHER REFERENCED TO OR NOT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL NECESSARY COMPONENTS FOR A COMPLETE INSTALLATION AND ENSURE THAT ALL INSTALLATIONS ARE IN ACCORDANCE WITH THE EQUIPMENT'S LISTING AND THE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS.
7. DO NOT SCALE DRAWINGS.
8. WATER PIPING SHALL BE ROUTED "AROUND" ELECTRICAL ROOMS.
9. PROVIDE SHEET METAL DRAIN PAN UNDER GRAVITY OR PUMPED DRAIN PIPING WHERE PIPING OCCURS ABOVE KITCHENS, FOOD SERVICE PREP, OR FOOD SERVICE CORRIDORS. PIPE 3/4" DRAIN FROM DRAIN PAN TO OVER NEAREST FLOOR SINK.
10. PROVIDE SHEET METAL DRAIN PAN UNDER PIPING WHERE PIPING OCCURS ABOVE ANY ELECTRICAL ROOMS. INFORMATION TECHNOLOGY (IT) CENTER, OR ELECTRICAL SWITCH GEAR. PIPE 3/4" DRAIN FROM DRAIN PAN TO OVER NEAREST FLOOR SINK.
11. REFER TO CIVIL DRAWINGS FOR INVERT AT SITE UTILITY POINTS OF CONNECTION. PROVIDE INCREASER FOR STORM DRAIN OR SEWER AS REQUIRED FOR CONNECTION TO CIVIL.
12. INSULATED PIPING EXPOSED TO VIEW THROUGHOUT THE FACILITY (EXCLUDING JANITORS CLOSETS AND MECHANICAL ROOMS) SHALL BE COVERED AND FINISHED WITH PVC JACKET EQUAL TO MANVILLE PVC / PERIPIPE JACKETING SYSTEM USING 30 MIL THICK JACKET. INSTALL PER MANUFACTURER'S INSTRUCTIONS WITH SEAM ON TOP OF PIPE SO AS TO NOT BE VISIBLE FROM OCCUPIED SPACE.
13. SEISMIC RESTRAINTS SHALL BE PROVIDED PER THE 2009 IBC, VA SPECIFICATIONS SECTION 130541, AND THE SMACNA SEISMIC RESTRAINT MANUAL - GUIDELINES FOR MECHANICAL SYSTEMS. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF THE PROPOSED RESTRAINTS. STRUCTURAL ATTACHMENT METHODS AND RESTRAINT LOCATIONS TO THE ARCHITECT FOR REVIEW AND APPROVAL. THE SUBMITTED DOCUMENTS SHALL BE PREPARED AND STAMPED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF NEVADA.
14. COORDINATE SPRINKLER/STANDPIPE DRAIN REQUIREMENTS AND LOCATIONS WITH FIRE PROTECTION DIVISION OF WORK.
15. PROVIDE TRAP PRIMERS FOR AREAS OF INFREQUENT USE, INCLUDING FLOOR DRAINS IN RESTROOMS AND MECHANICAL ROOMS, WITH DISTRIBUTION UNITS FOR MULTIPLE FLOOR DRAINS AND FLOOR SINKS. TRAP PRIMER SHALL BE ACCESSIBLE AND INSTALLED PER MANUFACTURER'S REQUIREMENTS. PROVIDE LINE SIZE SHUT-OFF VALVE AHEAD OF EACH TRAP PRIMER. ALL ELECTRONIC TYPE TRAP PRIMERS SHALL HAVE 4 TO 30 OUTS, VACUUM BREAKER, 24 HOUR CLOCK, MANUAL OVERRIDE, SOLENOID VALVE, CALIBRATED MANIFOLD WITH 1/2" OUTLET COMPRESSION FITTINGS. PROVIDE 3/4" SHUT-OFF VALVE ON INLET. (ELECTRONIC TRAP PRIMERS TO BE LOCATED IN MECHANICAL ROOMS AND WHERE NOTED. PROVIDE RECESSED MOUNT IN STUD WALLS AND SURFACE MOUNT ON CONCRETE AND BLOCK WALLS.)
16. REFER TO FLOW CONTROL VALVE DETAIL FOR NOMINAL GPM AT EACH HOT WATER RETURN BRANCH LINE CONNECTION.
17. HOT WATER RETURN PIPING BRANCH LINES TO DROP DOWN IN WALL AND CONNECT TO HOT WATER SUPPLY AT STOPS. REFER TO DETAIL SHEET FOR DIAGRAMS SHOWING CONNECTIONS.
18. ARRANGE WATER HEATERS AND PIPING TO PROVIDE EASE OF DISASSEMBLY AND MAINTENANCE.
19. PLUMBING RISERS, DRAIN STACKS, AND BRANCH PIPING OFF MAINS SHALL BE COORDINATED WITH MECHANICAL DUCTWORK, MECHANICAL PIPING, AND FIRE PROTECTION PIPING SYSTEMS.
20. INSTALL PIPING HIGH AS POSSIBLE.
21. INDUSTRIAL COLD WATER PIPING SERVING LANDSCAPE PLANTERS AND TREES SHALL BE SUPPLIED THROUGH BACKFLOW PREVENTER BY LANDSCAPE SECTION. REFER TO LANDSCAPE DRAWINGS FOR FINAL STUB-UP AND TERMINATION SERVING ALL PLANTERS AND STATIONS.
22. PROVIDE A 6 MIL. POLYETHYLENE SLEEVE EQUAL TO IPS WATER-TITE FOR COPPER DOMESTIC WATER PIPE BELOW SLAB.
23. HOT AND COLD WATER SHUT-OFF VALVES AND HOT WATER RETURN THROTTLING VALVES SHALL BE LOCATED TO BE EASILY ACCESSED.
24. PROVIDE WALL CLEANOUTS AT SINKS AND URINALS IN ACCORDANCE WITH APPLICABLE SECTIONS OF 2009 UNIFORM PLUMBING CODE.
25. REFER TO MIXING VALVE DETAIL FOR LAVATORY/SINK TEMPERED WATER DETAIL. PROVIDE THERMOSTATIC TYPE MIXING VALVE AS INDICATED.
26. VENTS THROUGH ROOF SHALL BE MINIMUM 10'-0" FROM ANY OUTSIDE AIR INTAKES AND BUILDING OPENINGS.




(THIS IS A MASTER LEGEND, NOT ALL SYMBOLS MAY APPEAR ON DRAWING)

ABBR	SYMBOL	DESCRIPTION
		SHEET NOTE
		REVISION NUMBER
S OR W	-----	SOIL, WASTE OR SEWER BELOW GRADE OR FLOOR
S OR W	-----SD-----	SOIL, WASTE OR SEWER ABOVE GRADE OR FLOOR
SD	-----SD-----	STORM DRAIN BELOW GRADE OR FLOOR
SD	-----SD-----	STORM DRAIN ABOVE GRADE OR FLOOR
OSD	-----OSD-----	OVERFLOW STORM DRAIN BELOW GRADE OR FLOOR
OSD	-----OSD-----	OVERFLOW STORM DRAIN ABOVE GRADE OR FLOOR
V	-----	VENT
SCW	-----	SOFT COLD WATER
SHW	-----	SOFT HOT WATER (140°F)
SHWR	-----	SOFT HOT WATER RETURN (140°F)
STW	-----T-----	SOFT TEMPERED WATER (105°F)
STWR	-----T-----	SOFT TEMPERED WATER RETURN (105°F)
FCW	-----F-----	FILTERED COLD WATER
PD	-----PD-----	PUMPED DRAIN
D	-----D-----	DRAIN
PW	-----PW-----	PUMPED WASTE BELOW GRADE OR FLOOR
ICW	-----ICW-----	INDUSTRIAL COLD WATER
LPS	-----LPS-----	LOW PRESSURE STEAM (15 PSI)
HPS	-----HPS-----	HIGH PRESSURE STEAM (125 PSI)
F	-----F-----	FIRE LINE
CSP	-----CSP-----	COMBINATION STAND PIPE
	=====	PIPING BELOW GRADE WITH HEAT TRACE
	=====	PIPING ABOVE GRADE WITH HEAT TRACE
SOV		SHUT-OFF VALVE
BVA		BALANCING VALVE ASSEMBLY
CV		CHECK VALVE
		STRAINER
		UNION
PG		PRESSURE GAUGE
		SOLENOID VALVE
		RELIEF VALVE
		PIPE REDUCTER
HB		HOSE BIBB
RHB		RECESSED HOSE BIBBS
		FLEXIBLE PIPE CONNECTION
		REDUCED PRESSURE BACKFLOW PREVENTER
WHA		WATER HAMMER ARRESTOR
TH		THERMOMETER
CO		CLEANOUT
WCO		WALL CLEANOUT
FD		FLOOR DRAIN
FS		FLOOR SINK
RD		ROOF DRAIN
ORD		OVERFLOW ROOF DRAIN
VTR		VENT THRU ROOF
FDC		FIRE DEPARTMENT CONNECTION
FSR		FIRE SPRINKLER RISER
		PIPE DOWN
		PIPE UP
		PIPE TEE UP
		PIPE TEE DOWN
		ANCHOR
		GUIDE
POC		POINT OF CONNECTION TO EXISTING
POD		POINT OF DISCONNECTION FROM EXISTING
SLS		SOLAR LOOP SUPPLY
SLR		SOLAR LOOP RETURN

(THIS IS A MASTER LIST, NOT ALL ABBREVIATIONS MAY APPEAR ON DRAWINGS)

AFB	ABOVE FINISH FLOOR	MBH	1000 BRITISH THERMAL UNITS PER HOUR
AP	ACCESS PANEL	MC	MAXIMUM
AUTO	AUTOMATIC	MCM	MECHANICAL CONTRACTOR
AD	ACCESS DOOR / AREA DRAIN	MCA	MINIMUM CIRCUIT AMPS
BTU	BRITISH THERMAL UNIT	MOCP	MAXIMUM OVER CURRENT
BOS	BOTTOM OF STEEL		PROTECTION
BOH	BACK OF HOUSE	MCC	MOTOR CONTROL CENTER
BMS	BUILDING MANAGEMENT SYSTEM	MH	MINIMUM MANHOLE
C	DEGREES CELSIUS		
CFM	CUBIC FEET PER MINUTE	NA	NOT APPLICABLE
CFH	CUBIC FEET PER HOUR	NEC	NATIONAL ELECTRIC CODE
CP	CHROME PLATED	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
DDC	DIRECT DIGITAL CONTROL	NIC	NOT IN CONTRACT
DDCFP	DIRECT DIGITAL CONTROL FIELD PANEL	NTS	NOT TO SCALE
DC	DIRECT CURRENT	OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
DIA	DIAMETER		
DF	DRINKING FOUNTAIN		
DN	DOWN	PH	PHASE
DSN	DOWNSPOUT NOZZLE	PA	PRESSURE AVAILABLE
E	EXISTING	PRV	PRESSURE REDUCING VALVE
EMCS	ENERGY MANAGEMENT CONTROL SYSTEM	PSI	POUNDS PER SQUARE INCH
EWC	ELECTRIC WATER COOLER	PSIA	POUNDS PER SQUARE INCH ABOVE ATMOSPHERE
EFF	EFFICIENCY	PSIG	POUNDS PER SQUARE INCH GAUGE
ET	EXPANSION TANK	PD	PRESSURE DROP
		PDI	PLUMBING DRAINAGE INSTITUTE
"F	DEGREES FARENHEIT	POS	PROVIDE BY OTHER SECTION
FLA	FULL LOAD AMPS	P	PUMP
FCO	FLOOR CLEAN OUT	POC	POINT OF CONNECTION
FS	FEET PER MINUTE	POD	POINT OF DISCONNECT
FPS	FEET PER SECOND		
FT	FEET / FLUSH TANK	RPM	REVOLUTIONS PER MINUTE
FH	FIRE HYDRANT	RR	ROOF RECEPTAL
FV	FLUSH VALVE		
FU	FIXTURE UNITS	S	SINK
		SH	SHOWER / STATIC HEAD
GAL	GALLONS	SO	SHUT-OFF VALVE
GC	GENERAL CONTRACTOR	SP	STATIC PRESSURE
GPM	GALLONS PER MINUTE	SS	STAINLESS STEEL / SERVICE SINK
GPH	GALLONS PER HOUR	SQ FT	SQUARE FEET
HD	HEAD	T	TEMPERATURE
HP	HORSE POWER	TAB	TESTING AND BALANCING
HR	HOUR	TEL	TOTAL EQUIVALENT LENGTH
HS	HAND SINK	TP	TRAP PRIMER
HZ	HERTZ	TOS	TOP OF STEEL
HOA	HAND OFF AUTO	TYP	TYPICAL
		TS	TEMPERING STATION
IN (")	INCH	TDH	TOTAL DEVELOPED HEAD
IBC	INTERNATIONAL BUILDING CODE	TW	TEMPERED WATER
IMC	INTERNATIONAL MECHANICAL CODE		
IPC	INTERNATIONAL PLUMBING CODE	U	URINAL
IE	INVERT ELEVATION	UMC	UNIFORM MECHANICAL CODE
		UPC	UNIFORM PLUMBING CODE
KW	KILOWATT	UNO	UNLESS NOTED OTHERWISE
LAV/L	LAVATORY	V	VENTS / VOLTS
LBS	POUNDS		
		WC	WATER CLOSET
		WG	WATER GAUGE
		WFU	WATER FIXTURE UNITS
		WH	WATER HEATER
		WP	WATER PRESSURE
		WPD	WATER PRESSURE DROP

ISSUE		08-15-2012 ADDENDUM 1 05-07-2012 - CD2 Submittal		Sheet Number	SHEET DESCRIPTION
*	*	PP-001	Plumbing - Sheet Index, Notes, Legend and Abbreviations		
*	*	PS-101	Plumbing Plan - Site		
*	*	PP-100A	Plumbing Plan - Basement Level - Admin - Domestic Water		
*	*	PP-100C	Plumbing Plan - Basement Level - Connector - Domestic Water		
*	*	PP-101A	Plumbing Plan - Level 1 - Admin - Domestic Water		
*	*	PP-101B	Plumbing Plan - Level 1 - Education Center - Domestic Water		
*	*	PP-102A	Plumbing Plan - Level 2 - Admin - Domestic Water		
*	*	PP-102B	Plumbing Plan - Roof - Education Center - Domestic Water		
*	*	PP-103A	Plumbing Plan - Level 3 - Admin - Domestic Water		
*	*	PP-104A	Plumbing Plan - Roof - Admin - Domestic Water		
*	*	PL-100A	Plumbing Plan - Basement Level - Admin - Waste and Vent		
*	*	PL-101A	Plumbing Plan - Level 1 - Admin - Waste and Vent		
*	*	PL-101B	Plumbing Plan - Level 1 - Education Center - Waste and Vent		
*	*	PL-101C	Plumbing Plan - Level 1 - Connector - Waste and Vent		
*	*	PL-102A	Plumbing Plan - Level 2 - Admin - Waste and Vent		
*	*	PL-102B	Plumbing Plan - Roof - Education Center - Waste and Vent		
*	*	PL-102C	Plumbing Plan - Level 2 - Connector - Waste and Vent		
*	*	PL-103A	Plumbing Plan - Level 3 - Admin - Waste and Vent		
*	*	PL-103C	Plumbing Plan - Level 3 - Connector - Waste and Vent		
*	*	PL-104A	Plumbing Plan - Roof - Admin - Waste and Vent		
*	*	PL-104C	Plumbing Plan - Roof - Connector - Waste and Vent		
*	*	PP-201	Enlarged Plumbing Plans - Level 1 - Education Center Restrooms		
*	*	PP-202	Enlarged Plumbing Plans - Level 01 - Admin Restrooms		
*	*	PP-203	Enlarged Plumbing Plans - Level 02 - Admin Restrooms		
*	*	PP-204	Enlarged Plumbing Plans - Level 03 - Admin Restrooms		
*	*	PP-205	Enlarged Plumbing Plans - Basement - Mechanical Room		
*	*	PL-301	Waste and Vent Isometric - Admin		
*	*	PL-302	Waste and Vent Isometric - Education Center		
*	*	PL-311	Storm Drain Isometric - Admin		
*	*	PL-312	Storm Drain Isometric - Education Center		
*	*	PP-301	Domestic Water Isometric - Admin		
*	*	PP-302	Domestic Water Isometric - Education Center		
*	*	PP-401	Plumbing - Details		
*	*	PP-402	Plumbing - Details		
*	*	PP-403	Plumbing - Details		
*	*	PP-404	Plumbing - Details		
*	*	PP-501	Plumbing - Schedules		
*	*	PP-502	Plumbing - Schedules		
*	*	PP-503	Plumbing - Schedules		
*	*	PP-601	Domestic and Solar Water Flow Diagrams		

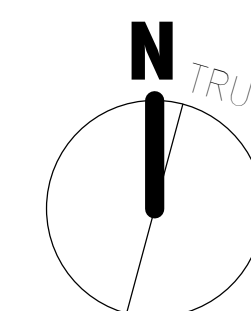
ADDENDUM 1	09/15/12	CONSULTANTS:	KEY PLAN	ARCHITECT/ENGINEERS:	Drawing Title Plumbing - Sheet Index, Notes, Legend and Abbreviations Scale Approved: Project Director 	Project Title VA Medical Center - PHASE V, Administration Bldg. & Education Ctr. Addition Location North Las Vegas, NV Date June 15, 2012 Checked MTD Drawn MAD	Project Number 593CA2202 Building Number 6 Drawing Number PP-001 322 of 512	Office of Construction and Facilities Management  Department of Veterans Affairs
		CIVIL: SLATER HANIFAN GROUP, 5740 S. ARVILLE ST. #216, LAS VEGAS, NV 89119 LANDSCAPE: J+W ZUNINO LANDSCAPE ARCHITECTURE, 3191 S. JONES BLVD., LAS VEGAS, NV 89146 MEP: JBA CONSULTING ENGINEERING, 5155 WEST PATRICK LANE, LAS VEGAS, NV 89118 STRUCTURAL: DEGENKOLB ENGINEERING, 235 MONTGOMERY STREET, SUITE 500, SAN FRANCISCO CA 94104 GEOTECHNICAL: NINYO AND MOORE, 6700 PARADISE ROAD, SUITE E, LAS VEGAS, NV 89119 FIRE & LIFE SAFETY: LASALLE ENGINEERING, 1000 YORK ROAD, WILLOW GROVE, PA 19090		 <i>A Joint Venture</i>				
Revisions:	Date:							



1	ADDENDUM 1	08/15/12
Revisions:		Date:

CIVIL:	SLATER HANIFAN GROUP, 5740 S. ARVILLE ST. #216, LAS VEGAS, NV 89118
LANDSCAPE:	J W ZUNINO LANDSCAPE ARCHITECTURE, 3191 S. JONES BLVD., LAS VEGAS, NV 89146
MEP:	KAJA CONSULTING ENGINEERING, 5155 WEST PATRICK LANE, LAS VEGAS, NV 89118
STRUCTURAL:	DEGENKOLB ENGINEERING, 233 MONTGOMERY STREET, SUITE 500, SAN FRANCISCO CA 94104
GEOTECHNICAL:	NINYO AND MOORE, 6700 PARADISE ROAD, SUITE E, LAS VEGAS, NV 89119
FIRE & LIFE SAFETY:	LASALLE ENGINEERING, 1000 YORK ROAD, WILLOW GROVE, PA 19090

RTKL
JMA ARCHITECTURE STUDIOS
A Joint Venture



Approved: Project Directo

Milan Aršić

Location	North Las Vegas, NV
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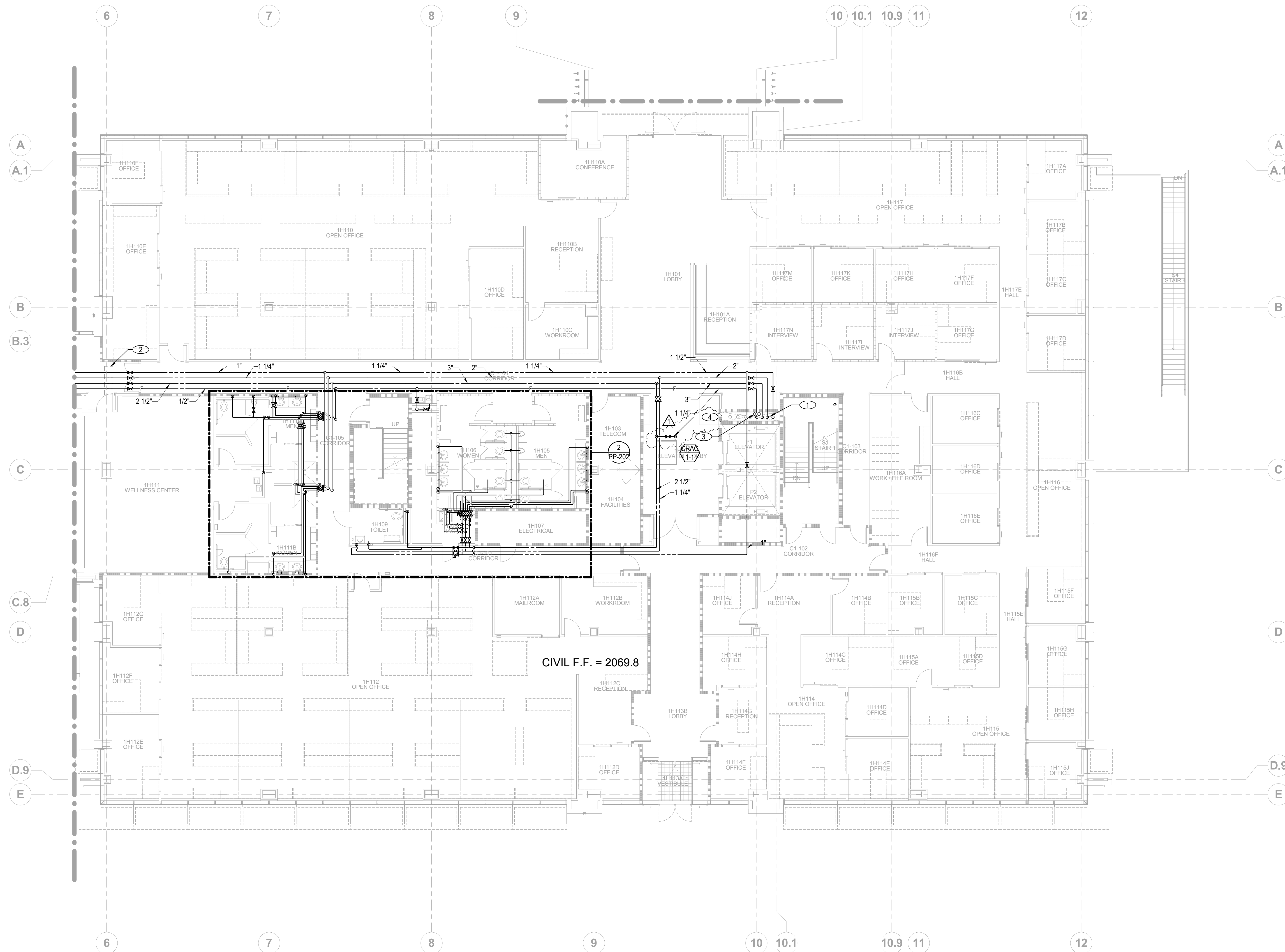
Date
June 15, 2012

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Drawing Number
DD 100A

334 of 512

 Department of
Veterans Affairs



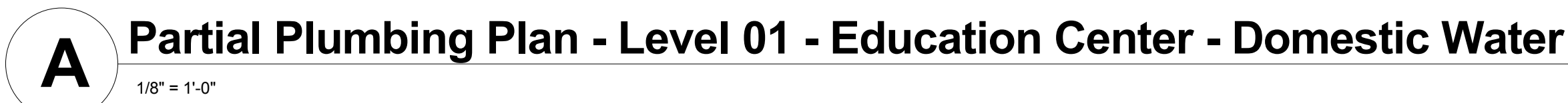
- # NOTES
- 1 3" SCW, 2" SHW, 1 1/2" SHWR, AND 1" FCW FROM BELOW. 3" SCW, 2" SHW, AND 1 1/2" SHWR UP.
 - 2 PROVIDE FLEXIBLE SEISMIC EXPANSION LOOPS FOR PIPING THROUGH EXPANSION JOINT (REFER TO STRUCTURAL AND ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND DETAILS OF EXPANSION JOINT); PIPING EXPANSION LOOPS SHALL BE LINE SIZED FOR +1/4" MOVEMENT. INSTALL EXPANSION LOOPS WITH HANGERS, SUPPORTS, ANCHORS, AND BRACES PER MANUFACTURER'S RECOMMENDATIONS.
 - 3 1" SLS AND SLR UP AND DOWN.
 - 4 CONNECT 1" SCW TO CRAC-1 PER MANUFACTURER'S RECOMMENDATIONS. REFER TO MECHANICAL DRAWING PACKAGE FOR ADDITIONAL INFORMATION.

CONSTRUCTION DOCUMENTS

BUILDING IS FULLY SPRINKLERED

10.0264

1. ADDENDUM 1		08/15/12	CONSULTANTS: CIVIL: SLATER HANIFAN GROUP, 5740 S. ARVILLE ST. #216, LAS VEGAS, NV 89118 LANDSCAPE: J W ZUNINO LANDSCAPE ARCHITECTURE, 3191 S. JONES BLVD., LAS VEGAS, NV 89146 MEP: JSA CONSULTING ENGINEERING, 5155 WEST PATRICK LANE, LAS VEGAS, NV 89118 STRUCTURAL: DEGENKOLB ENGINEERING, 235 MONTGOMERY STREET, SUITE 500, SAN FRANCISCO CA 94104 GEOTECHNICAL: NINYO AND MOORE, 6700 PARADISE ROAD, SUITE E, LAS VEGAS, NV 89119 FIRE & LIFE SAFETY: LASALLE ENGINEERING, 1000 YORK ROAD, WILLOW GROVE, PA 19090		KEY PLAN 		ARCHITECT/ENGINEERS: 		Drawing Title Plumbing Plan - Level 1 - Admin - Domestic Water Scale As indicated Approved: Project Director 		Project Title VVA Medical Center - PHASE V, Administration Bldg. & Education Ctr. Addition Location North Las Vegas, NV Date June 15, 2012		Checked MTD	Drawn MAD	Project Number 593CA2202 Building Number 6 Drawing Number PP-101A 326 of 512	Office of Construction and Facilities Management Department of Veterans Affairs	
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- 10.0264



① 3/4" SCW DOWN TO ETP-6. PIPE 1/2" SCW TO EACH FLOOR DRAIN AND FLOOR SINK.

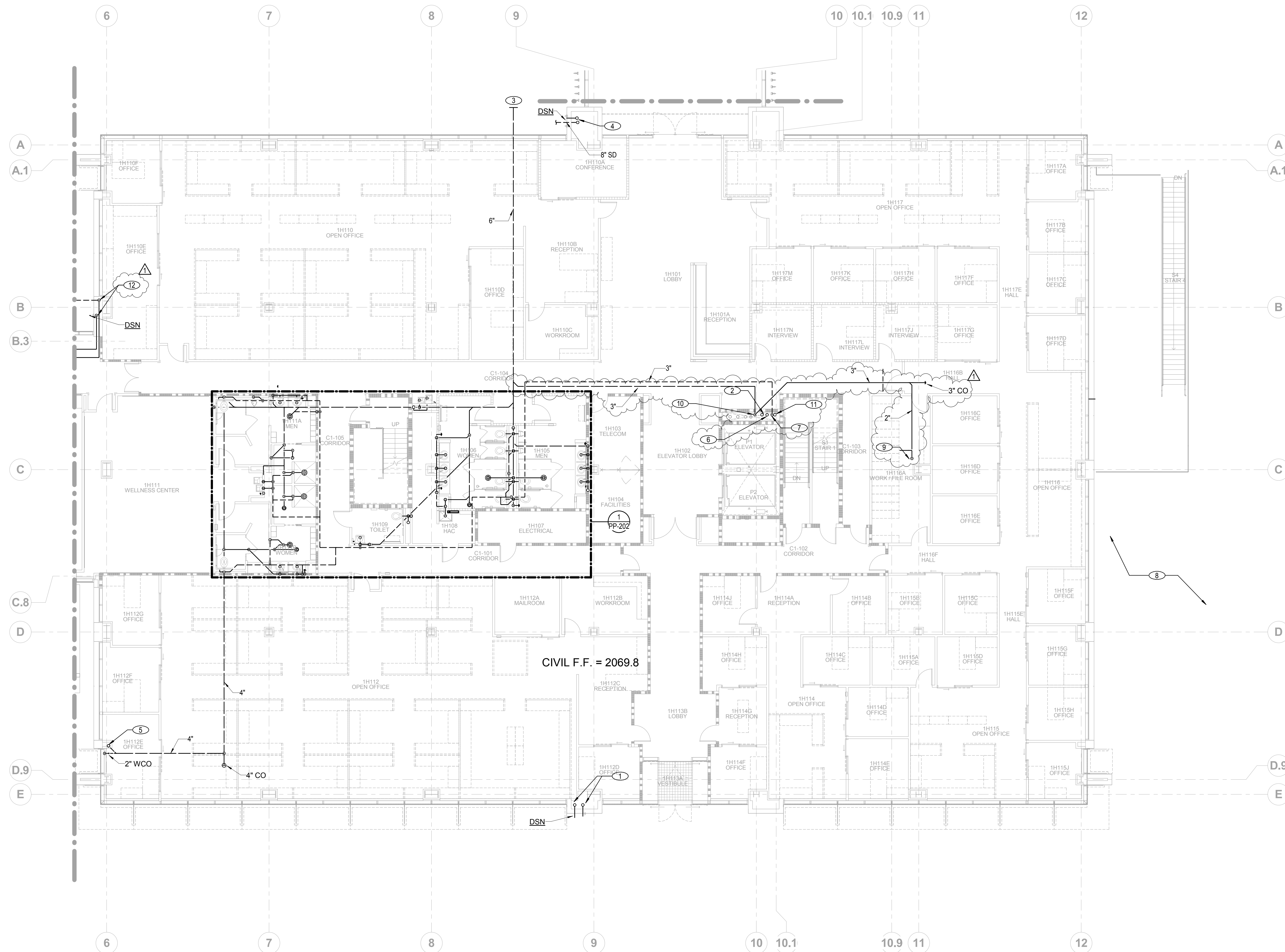
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VA FORM 08-6231



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- # NOTES
- 10" SD/OSD FROM ABOVE. DISCHARGE 10" SD/OSD ABOVE FINISHED GRADE WITH DSN. REFER TO ARCHITECTURAL AND CIVIL DRAWINGS FOR EXACT LOCATION AND DISCHARGE HEIGHT.
 - 3" VENT FROM BELOW AND UP FOR SO-1.
 - 6" W. REFER TO SHEET PS-101 FOR CONTINUATION.
 - 8" SD/OSD FROM ABOVE. CONNECT SD TO CIVIL SD PIPING BELOW GRADE. DISCHARGE OSD ABOVE FINISHED GRADE WITH DSN. REFER TO ARCHITECTURAL AND CIVIL DRAWINGS FOR EXACT LOCATION AND DISCHARGE HEIGHT.
 - 4" WASTE FROM ABOVE AND DOWN TO BELOW GRADE.
 - 3" VENT FROM BELOW AND UP FOR SE-1.
 - 3" VENT FROM BELOW.
 - SEE SHEET PL-100A FOR ADDITIONAL INFORMATION.
 - 2" WASTE FROM SINK ABOVE.
 - 3" WASTE DOWN TO BELOW SLAB.
 - 3" VENT FROM BELOW AND UP FOR SP-2.
 - 4" SD/OSD FROM ABOVE. CONNECT SD TO CIVIL SD PIPING BELOW GRADE. DISCHARGE OSD ABOVE FINISHED GRADE WITH DSN. REFER TO ARCHITECTURAL AND CIVIL DRAWINGS FOR EXACT LOCATION AND DISCHARGE HEIGHT.

CONSTRUCTION DOCUMENTS

BUILDING IS FULLY SPRINKLERED

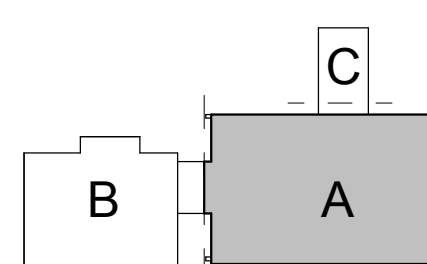
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1	ADDENDUM 1	08/15/12
Revisions:		Date:

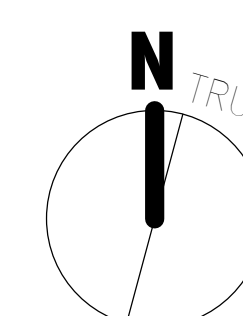
CONSULTANTS:

CIVIL: SLATER HANIFAN GROUP, 5740 S. ARVILLE ST. #216, LAS VEGAS, NV 89118
LANDSCAPE: J.W. ZUNINO LANDSCAPE ARCHITECTURE, 3161 S. JONES BLVD., LAS VEGAS, NV 89146
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FIRE & LIFE SAFETY: LASALLE ENGINEERING, 1000 YORK ROAD, WILLOW GROVE, PA 19090

KEY PLAN



ARCHITECT/ENGINEERS:



Drawing Title	Plumbing Plan - Level 1 - Admin - Waste and Vent
Scale	As indicated

Approved: Project Director

Milan Arškić

Project Title
VA Medical Center - PHASE
V, Administration Bldg. &
Education Ctr. Addition

	Location
	North Las Vegas, NV

Date
June 15, 2012

Checked	Check
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Drawn	MAD
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Project Number
593CA2202

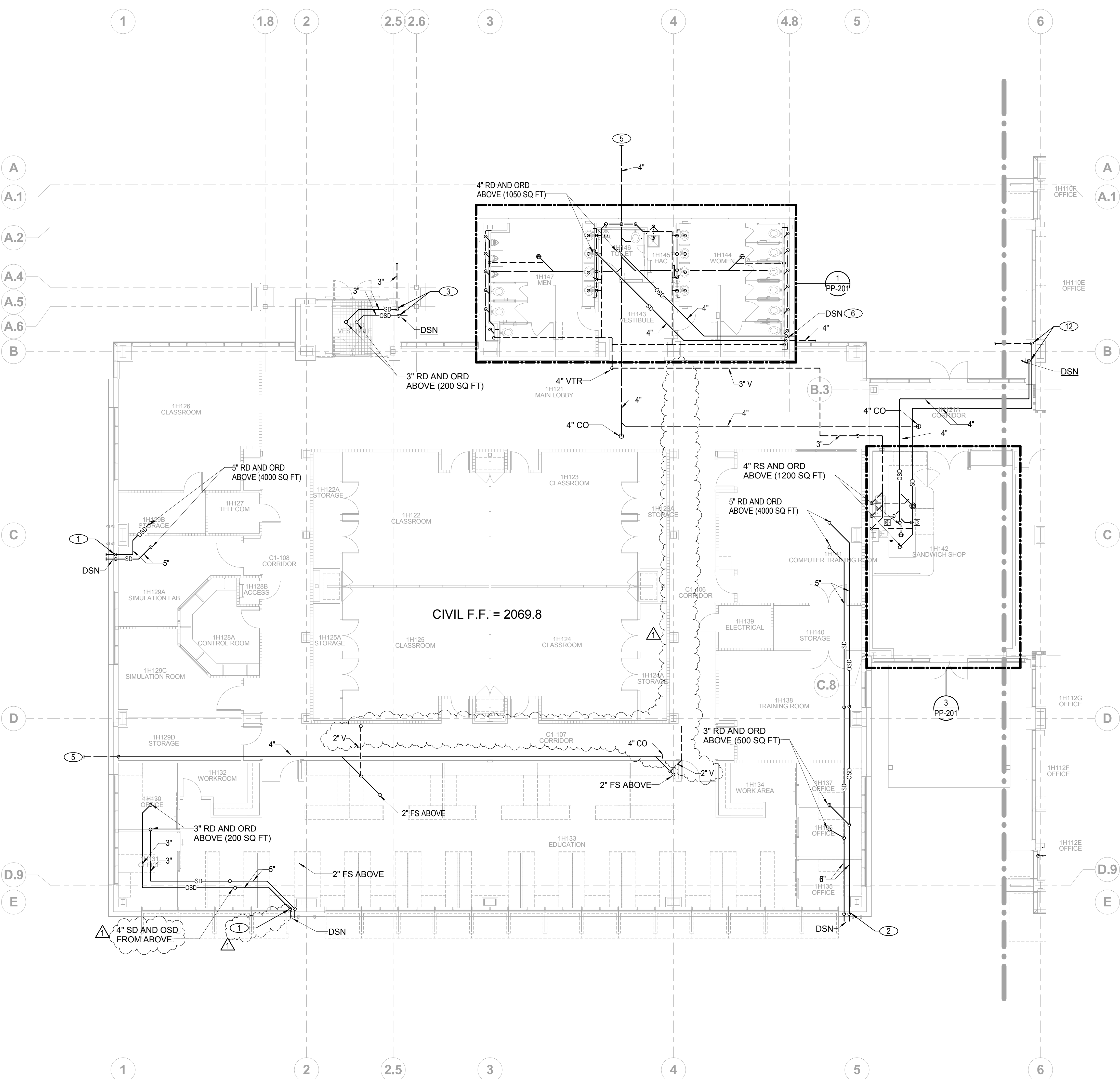
Building Number
6

Drawing Number
PL-101A

**Office of
Construction
and
Facilities
Management**



three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot
one sixteenth inch = one foot



A Partial Plumbing Plan - Level 1 - Education Center - Waste and Vent
1/8" = 1'-0"

- NOTES
- 1

5" SD/OSD FROM ABOVE. DISCHARGE 5" SD/OSD ABOVE FINISHED GRADE WITH DSN. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND DISCHARGE HEIGHT.
- 2

6" SD/OSD FROM ABOVE. DISCHARGE 6" SD/OSD ABOVE FINISHED GRADE WITH DSN. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND DISCHARGE HEIGHT.
- 3

3" SD/OSD FROM ABOVE CONNECT SD TO CIVIL SD PIPING BELOW GRADE. DISCHARGE OSD ABOVE GRADE WITH DSN. REFER TO ARCHITECTURAL AND CIVIL DRAWINGS FOR EXACT LOCATION AND DISCHARGE HEIGHT.
- 4

4" VENT RISER.
- 5

4" W REFER TO SHEET PS-101 FOR CONTINUATION.
- 6

4" SD/OSD FROM ABOVE. CONNECT SD TO CIVIL SD PIPING BELOW GRADE. DISCHARGE OSD ABOVE FINISHED GRADE WITH DSN. REFER TO ARCHITECTURAL AND CIVIL DRAWINGS FOR EXACT LOCATION AND DISCHARGE HEIGHT.
- 7

2" VENT UP TO PL-102B.

1 ADDENDUM 1 08/15/12

Revisions: Date:

CONSULTANTS:

CIVIL: SLATER HANIFAN GROUP, 5740 S. ARVILLE ST. #216, LAS VEGAS, NV 89118
LANDSCAPE: J W ZUNINO LANDSCAPE ARCHITECTURE, 3191 S. JONES BLVD., LAS VEGAS, NV 89146
MEP: JBA CONSULTING ENGINEERING, 5155 WEST PATRICK LANE, LAS VEGAS, NV 89118
STRUCTURAL: DEGENKOLB ENGINEERING, 235 MONTGOMERY STREET, SUITE 500, SAN FRANCISCO CA 94104
GEOTECHNICAL: NINYO AND MOORE, 6700 PARADISE ROAD, SUITE E, LAS VEGAS, NV 89119
FIRE & LIFE SAFETY: LASALLE ENGINEERING, 1000 YORK ROAD, WILLOW GROVE, PA 19090

KEY PLAN

ARCHITECT/ENGINEERS:

JMA ARCHITECTURE STUDIOS
A Joint Venture

Drawing Title
Plumbing Plan - Level 1 - Education Center - Waste and Vent
Scale
As indicated

Approved: Project Director

Project Title
VA Medical Center - PHASE V, Administration Bldg. & Education Ctr. Addition

Location
North Las Vegas, NV

Date
June 15, 2012

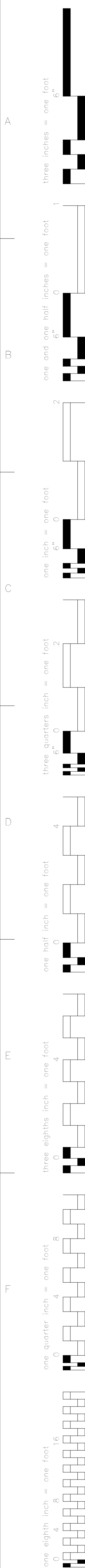
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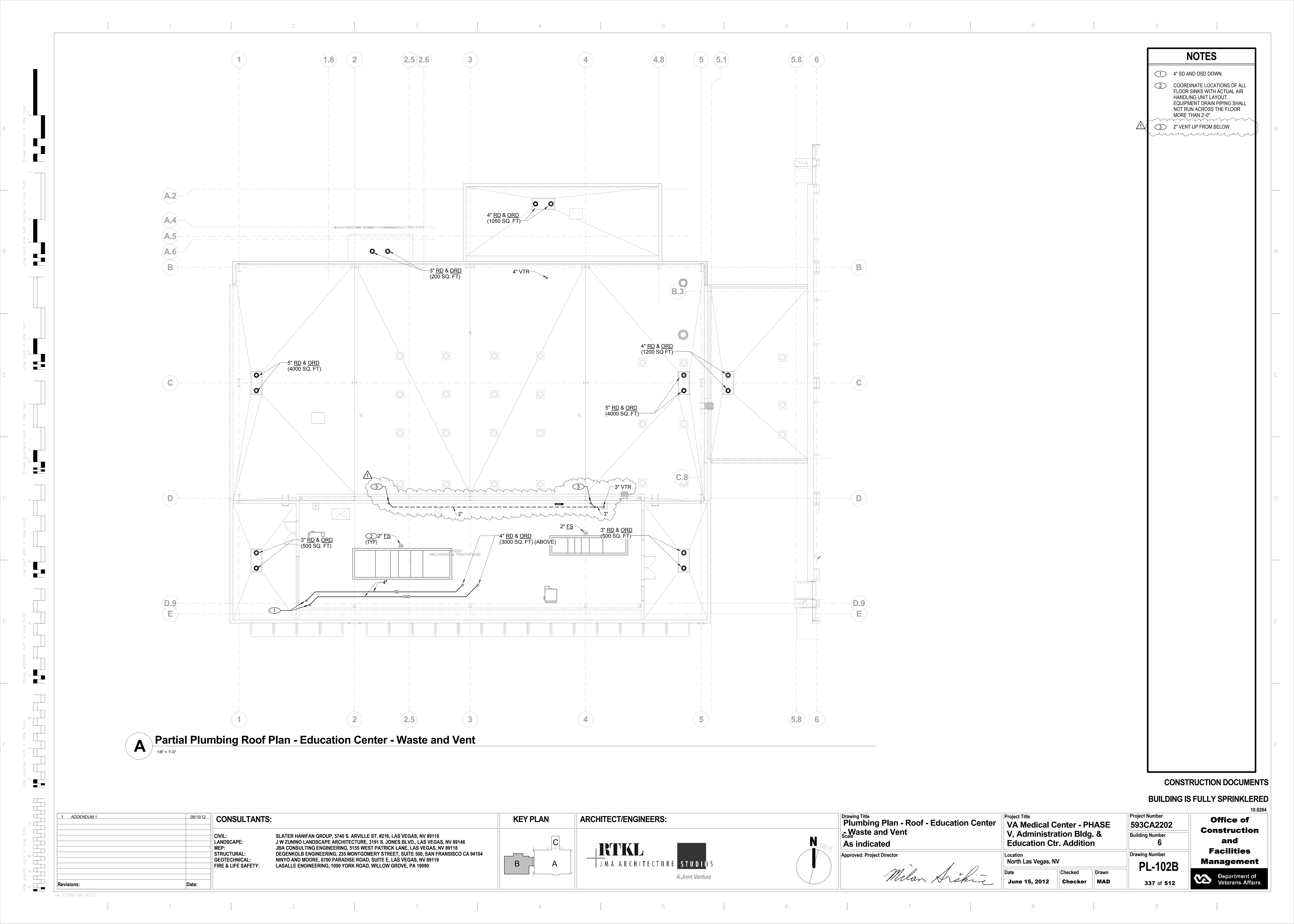
Project Number
593CA2202
Building Number
6

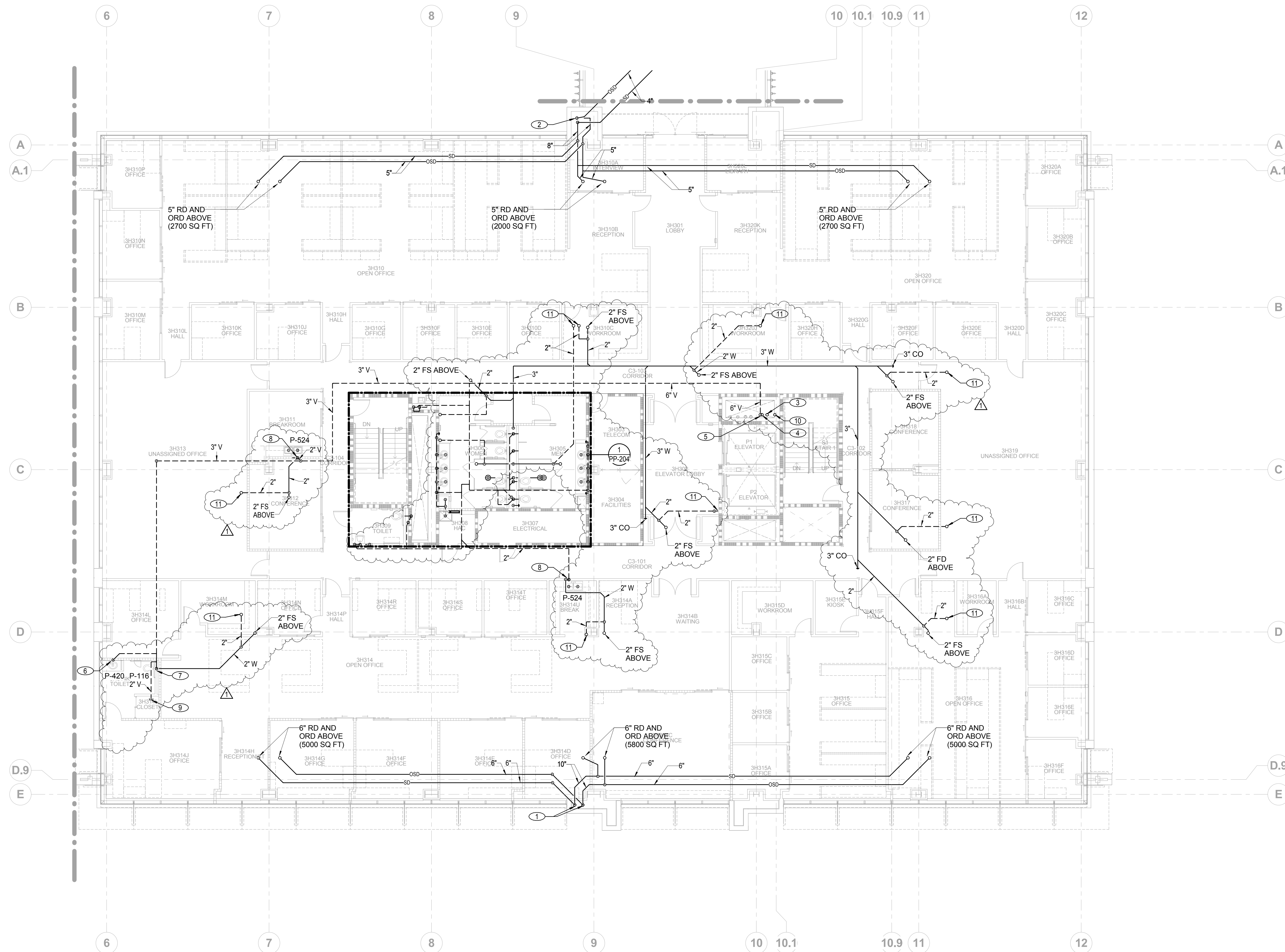
Drawing Number
PL-101B
334 of 512

Office of Construction and Facilities Management
Department of Veterans Affairs



A





Partial Plumbing Plan - Level 3 - Admin - Waste and Vent

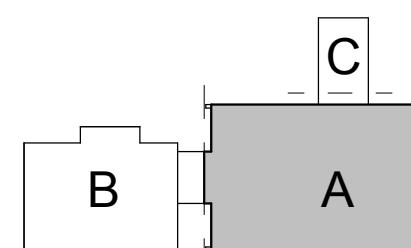
$$1/8'' = 1'-0''$$

1	ADDENDUM 1	08/15/12
Revisions:		Date:

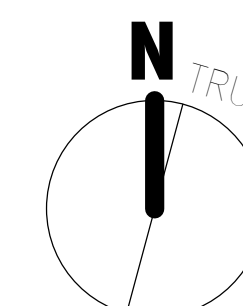
CONSULTANTS:

CIVIL:	SLATER HAMIFAN GROUP, 5740 S. ARVILLE ST. #216, LAS VEGAS, NV 89118
LANDSCAPE:	J W ZUNINO LANDSCAPE ARCHITECTURE, 3191 S. JONES BLVD., LAS VEGAS, NV 89146
MEP:	BGA CONSULTING ENGINEERING, 5155 WEST PATRICK LANE, LAS VEGAS, NV 89118
STRUCTURAL:	DEGENKOLB ENGINEERING, 235 MONTGOMERY STREET, SUITE 500, SAN FRANCISCO CA 94104
GEOTECHNICAL:	NINYO AND MOORE, 6700 PARADISE ROAD, SUITE E, LAS VEGAS, NV 89119
FIRE & LIFE SAFETY:	LASALLE ENGINEERING, 1000 YORK ROAD, WILLOW GROVE, PA 19090

KEY PLAN



ARCHITECT/ENGINEERS:



Drawing Title	Plumbing Plan - Level 3 - Admin - Waste and Vent
Scale	As indicated

Approved: Project Director

Milan Arškić

Project Title
VA Medical Center - PHASE
V, Administration Bldg. &
Education Ctr. Addition

Location	North Las Vegas, NV
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Date
June 15, 2012

Checked	Checker
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Drawn
MAD

Project Number	593CA2202
Building Number	6

Drawing Number
PL-103A

**Office of
Construction
and
Facilities
Management**



NOTES

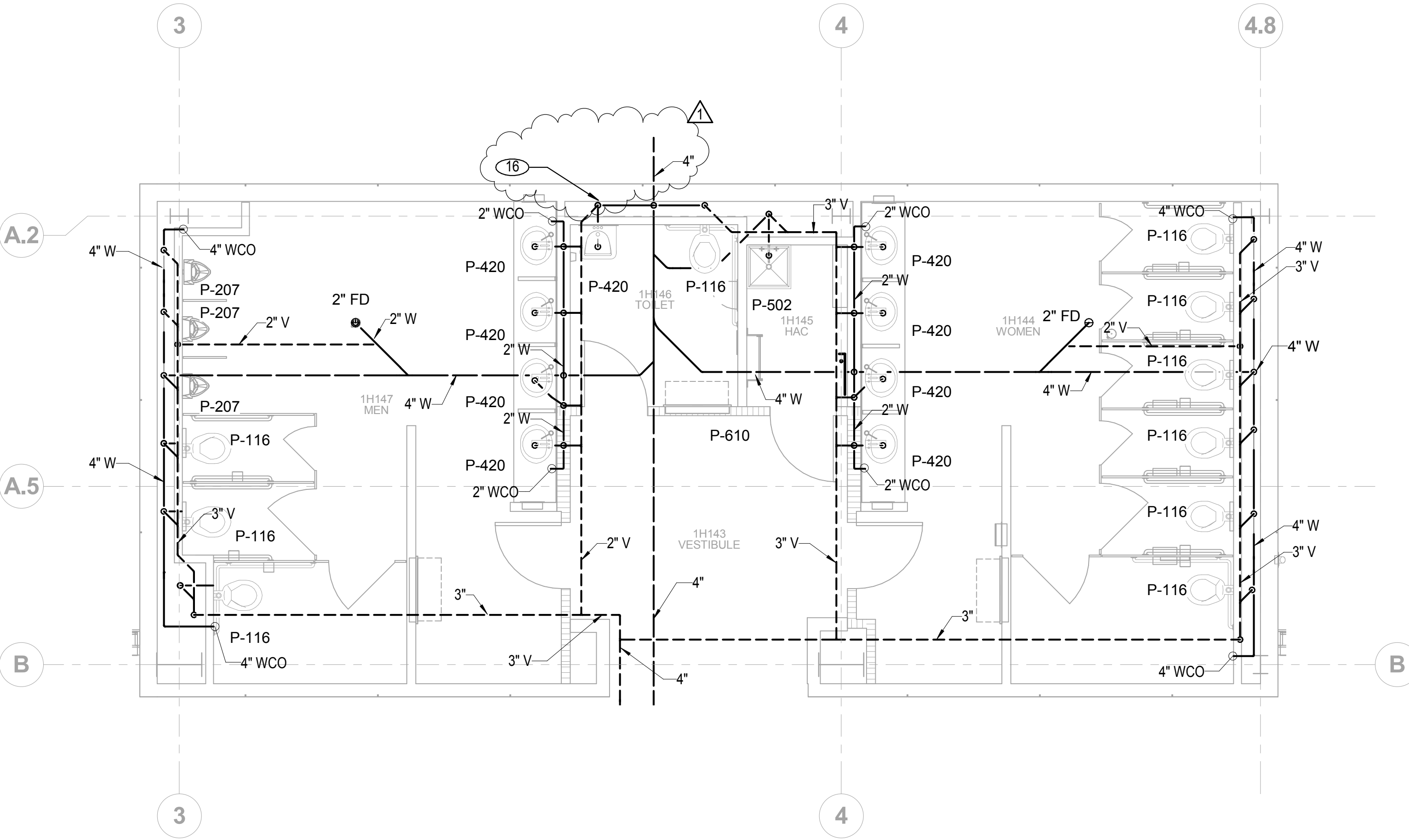
- ① 10" SD AND OSD DOWN.
- ② 8" SD AND OSD DOWN.
- ③ 3" VENT FROM BELOW AND UP FOR SE-1.
- ④ 3" VENT FROM BELOW AND UP FOR SO-1.
- ⑤ 6" VENT UP.
- ⑥ 2" WASTE DOWN WITH WCO AND 2" VENT UP FROM P-420.
- ⑦ 4" WASTE DOWN WITH WCO AND 2" VENT UP FROM P-116.
- ⑧ 2" WASTE DOWN WITH WCO AND 2" VENT UP FROM P-524. CONNECT 2" WASTE FROM ABOVE TO WASTE BELOW SINK CONNECTION
- ⑨ 2" VENT CAPPED FOR FUTURE
- ⑩ 3" VENT FROM BELOW AND UP FOR SP-2.
- ⑪ 2" VENT UP.



-

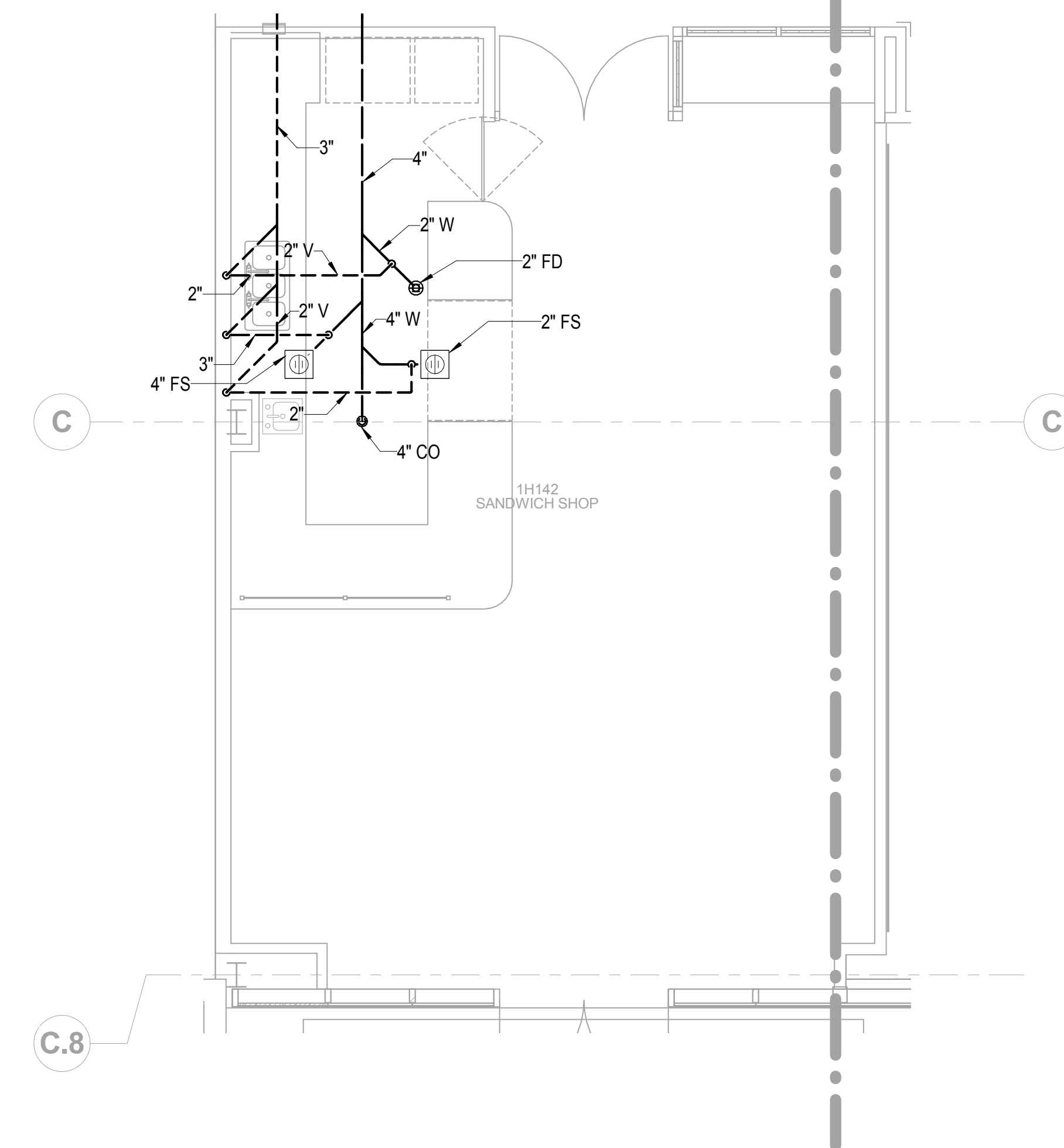
BUILDING IS FULLY SPRINKLERED

10.0264



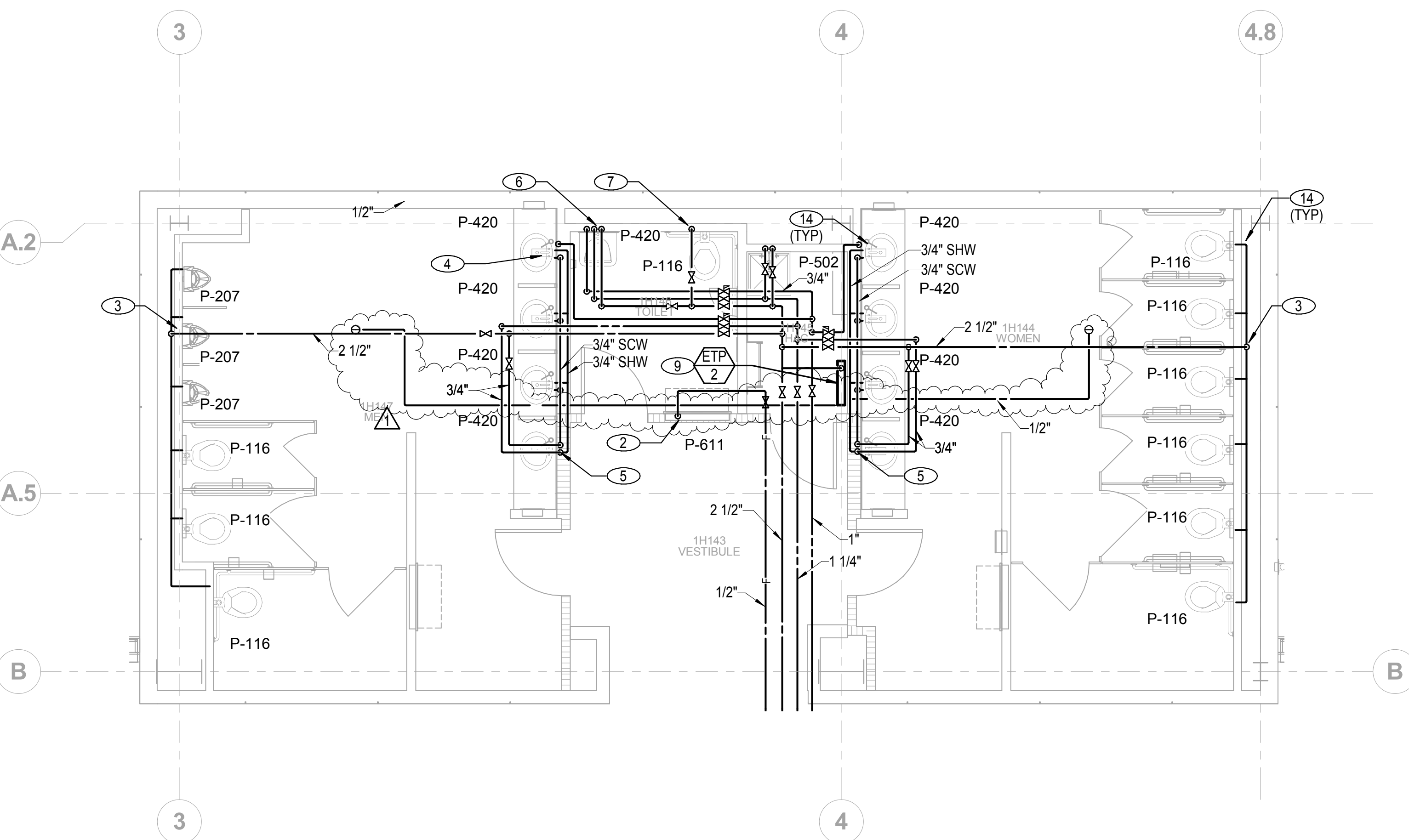
Enlarged Plumbing Plan - Level 01 - Education Center - Waste and Vent
1/4" = 1'-0"

1
PP-201



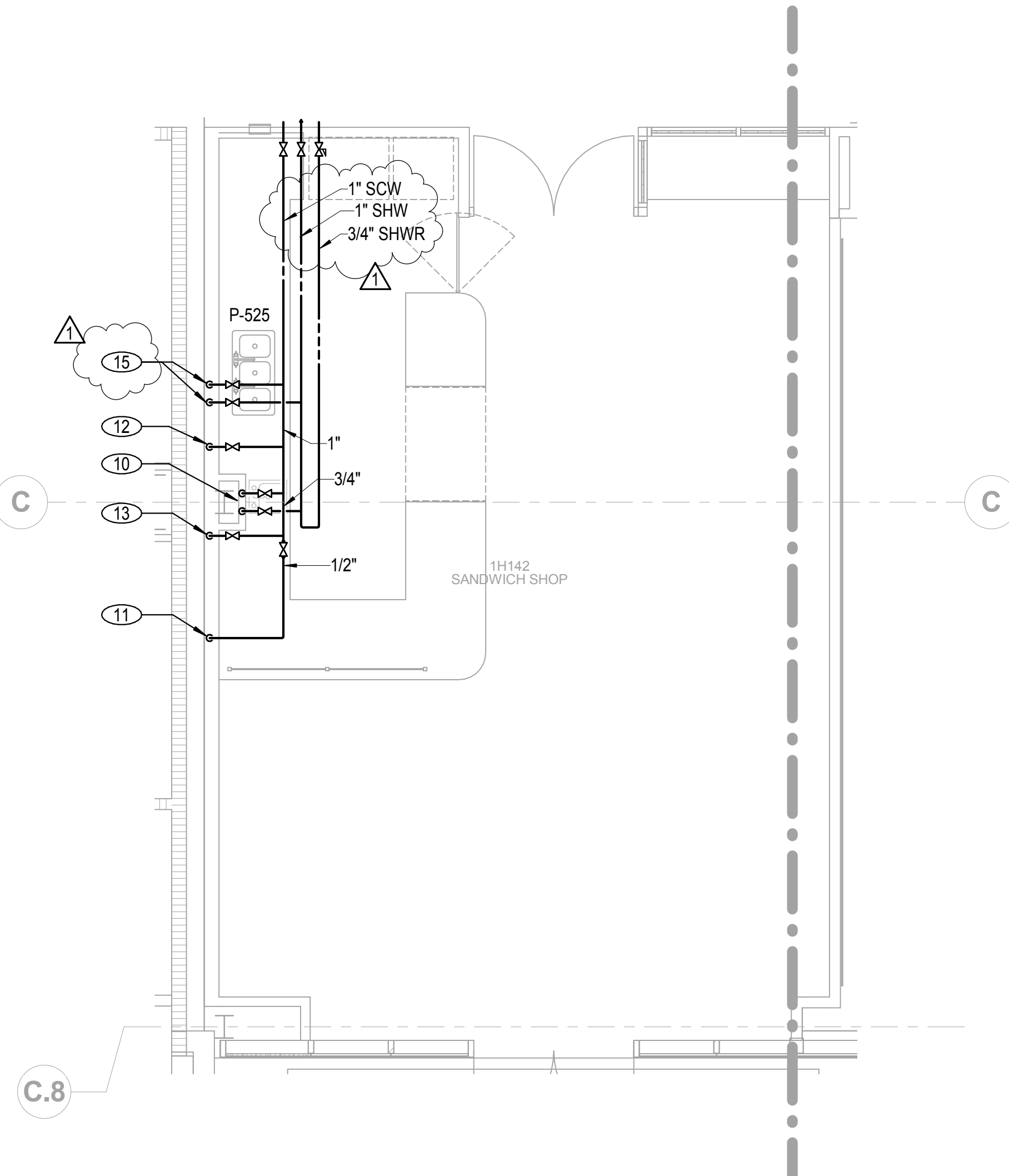
Enlarged Plumbing Plan - Level 01 - Sandwich Shop - Waste and Vent
1/4" = 1'-0"

3
PP-201



Enlarged Plumbing Plan - Level 01 - Education Center - Domestic Water
1/4" = 1'-0"

2
PP-201



Enlarged Plumbing Plan - Level 01 - Sandwich Shop - Domestic Water
1/4" = 1'-0"

4
PP-201

NOTES

- 1 - NOT USED.
- 2 1/2" SCW DOWN TO P-610.
- 3 2 1/2" SCW DOWN IN CHASE AND HEADER.
- 4 3/4" SHWR UP IN WALL. CONNECT TO SHW PIPING AFTER LAST FIXTURE.
- 5 3/4" SCW & SHW DOWN AND HEADER IN WALL. PROVIDE THERMOSTATIC MIXING VALVE AT EACH LAVATORY P-402 PER DETAIL 5/PP-402.
- 6 3/4" SCW AND SHW DOWN IN WALL TO P-421. SEE DETAIL 5/PP-402.
- 7 1 1/2" SCW DOWN IN WALL TO P-116.
- 8 3/4" SCW AND SHW DOWN IN WALL TO P-502.
- 9 3/4" SCW DOWN TO ETP-2. PIPE 1/2" SCW TO EACH FLOOR DRAIN AND FLOOR SINK.
- 10 3/4" SCW AND SHW DOWN TO HAND SINK. SEE FOOD SERVICE DRAWINGS FOR ADDITIONAL INFORMATION.
- 11 1/2" SCW DOWN IN WALL FOR EXPRESSO MACHINE. SEE FOOD SERVICE DRAWINGS FOR ADDITIONAL INFORMATION.
- 12 1/2" SCW DOWN IN WALL FOR ICE MAKER. SEE FOOD SERVICE DRAWINGS FOR ADDITIONAL INFORMATION.
- 13 3/4" SCW DOWN IN WALL FOR COFFEE BREWER. PROVIDE INLINE WATER FILTER. PIPE 1/2 SCW TO EACH FLOOR DRAIN AND SINK.
- 14 PROVIDE MINIMUM 12/12 ACCESS PANEL FOR WATER HAMMER ARRESTOR ACCESS AT EACH LOCATION.
- 15 3/4" SCW AND SHW DOWN TO THREE COMPARTMENT SINK. P-525.
- 16 2" W DOWN WITH WCO AND 2" V UP.

CONSTRUCTION DOCUMENTS

BUILDING IS FULLY SPRINKLERED

10.0264

1	ADDENDUM 1	08/15/12
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CONSULTANTS:	
CIVIL:	SLATER HANIFAN GROUP, 5740 S. ARVILLE ST. #216, LAS VEGAS, NV 89118
LANDSCAPE:	J W ZUNINO LANDSCAPE ARCHITECTURE, 3191 S. JONES BLVD., LAS VEGAS, NV 89146
MER:	JBA CONSULTING ENGINEERING, 5155 WEST PATRICK LANE, LAS VEGAS, NV 89118
STRUCTURAL:	DEGENKOLB ENGINEERING, 235 MONTGOMERY STREET, SUITE 500, SAN FRANCISCO CA 94104
GEOTECHNICAL:	NINYO AND MOORE, 6700 PARADISE ROAD, SUITE E, LAS VEGAS, NV 89119
FIRE & LIFE SAFETY:	LASALLE ENGINEERING, 1000 YORK ROAD, WILLOW GROVE, PA 19090

KEY PLAN

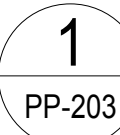
ARCHITECT/ENGINEERS:
RTKL
JMA ARCHITECTURE STUDIOS
A Joint Venture

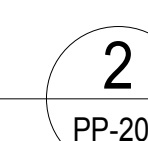
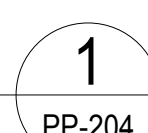
Drawing Title
Enlarged Plumbing Plans - Level 1 -
Education Center Restrooms
As indicated
Approved: Project Director
Melan Arskic

Project Title
VA Medical Center - PHASE
V, Administration Bldg. &
Education Ctr. Addition
Location
North Las Vegas, NV
Date
June 15, 2012
Checked
MTD
Drawn
MAD

Project Number
593CA2202
Building Number
6
Drawing Number
PP-201
343 of 512

Office of
Construction
and
Facilities
Management
Department of
Veterans Affairs







- CONSTRUCTION DOCUMENTS**
BUILDING IS FULLY SPRINKLERED

1 PIPING ISOMETRIC FOR REFERENCE ONLY. USE FLOOR PLANS, DETAILS, SCHEMATICS AND SPECIFICATIONS FOR CONSTRUCTION.



CONSULTANTS:	
CIVIL:	SLATER HANIFAN GROUP, 5740 S. ARVILLE ST. #216, LAS VEGAS, NV 89118
LANDSCAPE:	J W ZUNINO LANDSCAPE ARCHITECTURE: 3191 S. JONES BLVD., LAS VEGAS, NV 89146
MEP:	JSA CONSULTING ENGINEERING, 9155 WEST PATRICK LANE, LAS VEGAS, NV 89118
STRUCTURAL:	DEGENKOLB ENGINEERING, 235 MONTGOMERY STREET, SUITE 500, SAN FRANCISCO CA 94104
GEOTECHNICAL:	NINYO AND MOORE, 6700 PARADISE ROAD, SUITE E, LAS VEGAS, NV 89119
FIRE & LIFE SAFETY:	LASALLE ENGINEERING, 1000 UTILITY ROAD, WILLOW GROVE, PA 19099

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A Joint Venture

Scale


Approved: Project Director

Milan Aršić

Location North Las Vegas, NV		
Date June 15, 2012	Checked MTD	Drawn MAD

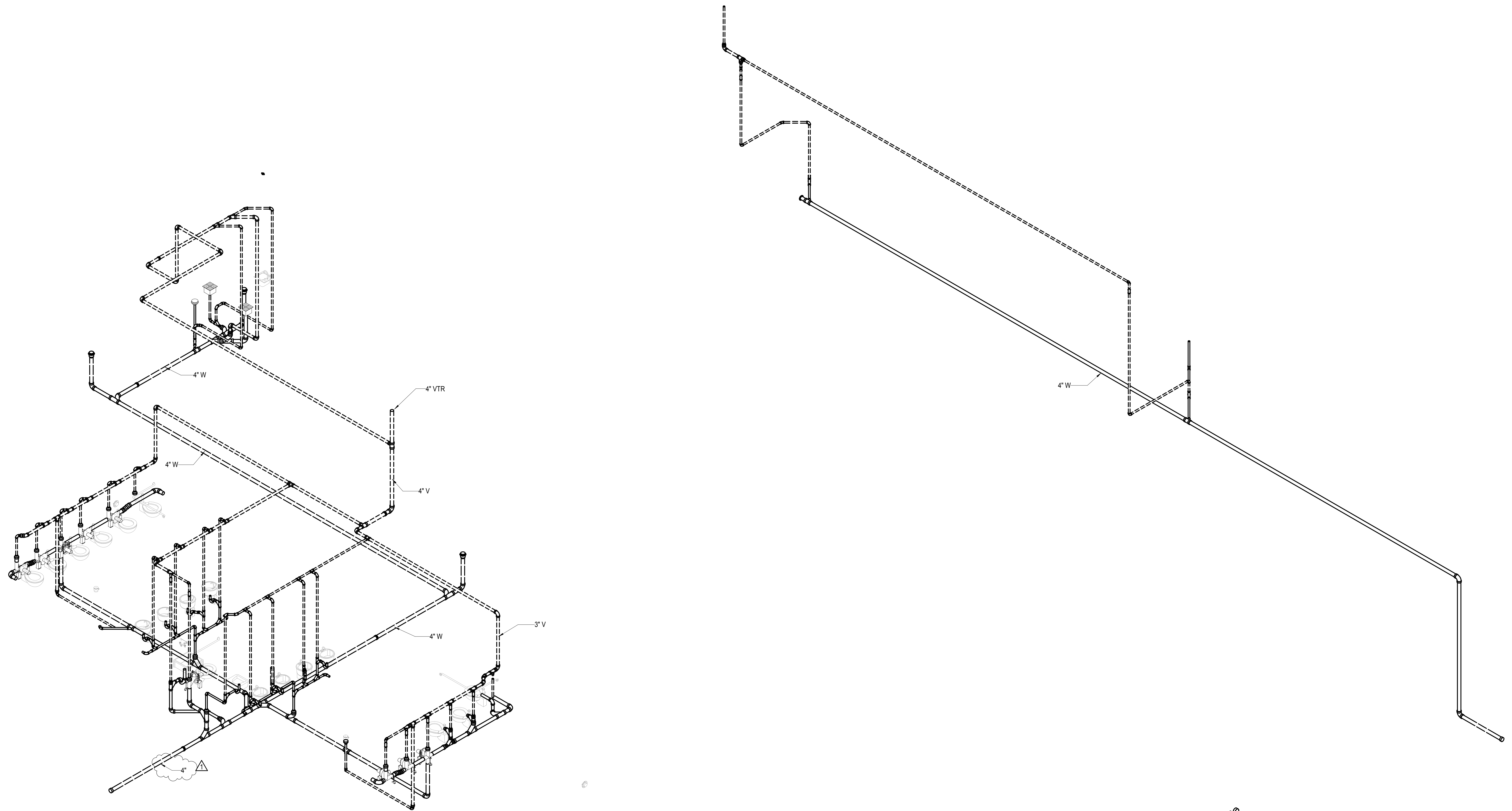
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**Office of
Construction
and
Facilities
Management**




 Department of
Veterans Affairs

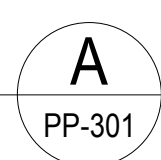
BUILDING IS FULLY SPRINKLERED

10.0264

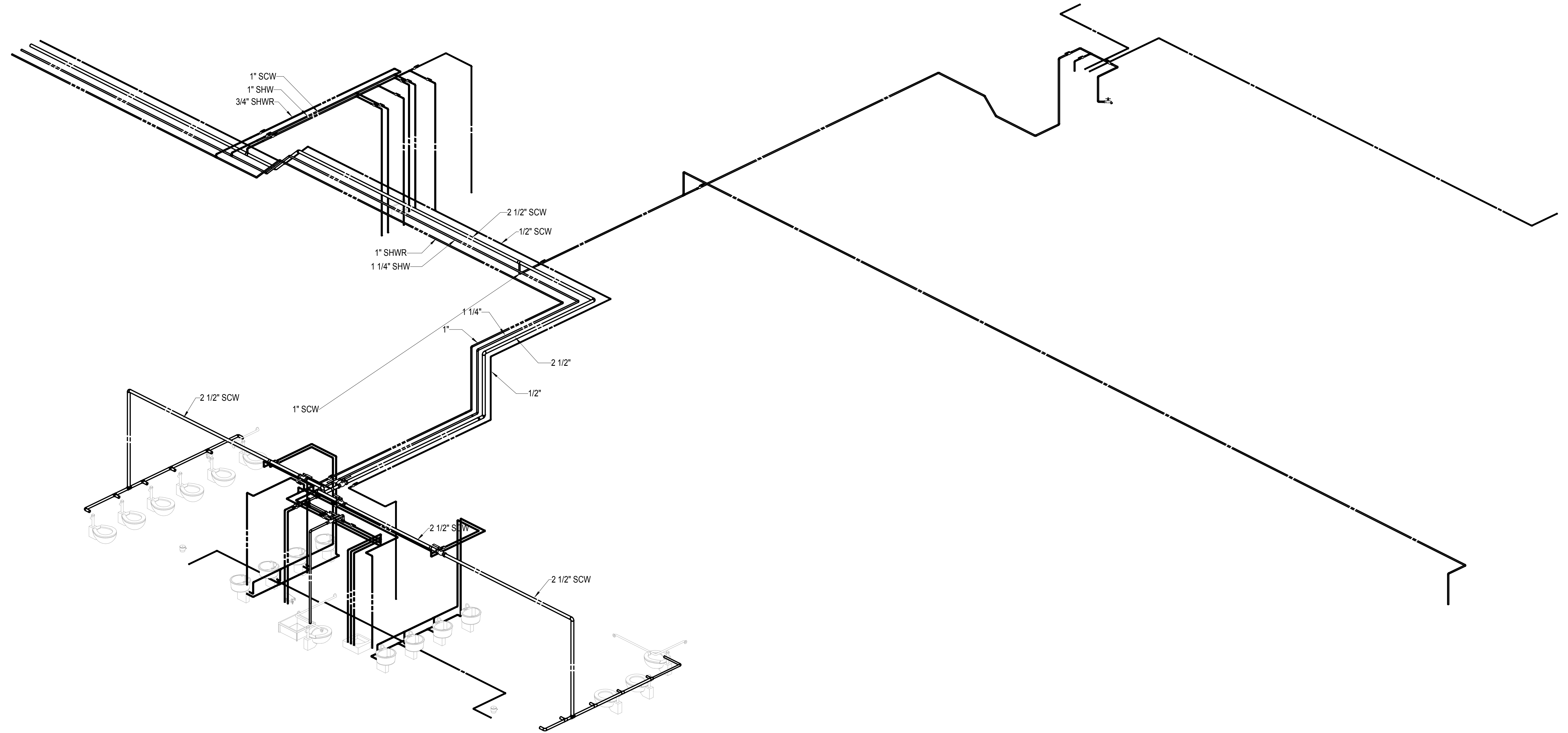


Waste and Vent Isometric - Education Center

1 ADDENDUM 1		08/15/12	CONSULTANTS:		KEY PLAN	ARCHITECT/ENGINEERS:	<div><div>Drawing Title</div><div>Waste and Vent Isometric - Education Center</div><div>Scale</div></div>	<div><div>Project Title</div><div>VA Medical Center - PHASE V, Administration Bldg. & Education Ctr. Addition</div></div>	<div><div>Project Number</div><div>593CA2202</div></div>	<div><div>Office of Construction and Facilities Management</div><div> Department of Veterans Affairs</div></div>	
			CIVIL: SLATER HANIFAN GROUP, 5740 S. ARVILLE ST. #216, LAS VEGAS, NV 89118 LANDSCAPE: J W ZUNINO LANDSCAPE ARCHITECTURE, 3191 S. JONES BLVD., LAS VEGAS, NV 89146 MEP: JBA CONSULTING ENGINEERING, 5155 WEST PATRICK LANE, LAS VEGAS, NV 89118 STRUCTURAL: DEGENKOLB ENGINEERING, 235 MONTGOMERY STREET, SUITE 500, SAN FRANCISCO CA 94104 GEOTECHNICAL: NINYO AND MOORE, 6700 PARADISE ROAD, SUITE E, LAS VEGAS, NV 89119 FIRE & LIFE SAFETY: LASALLE ENGINEERING, 1000 YORK ROAD, WILLOW GROVE, PA 19090		<div><div></div><div>A Joint Venture</div></div>	<div><div>Approved: Project Director</div><div></div></div>	<div><div>Location</div><div>North Las Vegas, NV</div></div>	<div><div>Building Number</div><div>6</div></div>	<div><div>Drawing Number</div><div>PL-302</div></div>		
							<div><div>Date</div><div>June 15, 2012</div></div>	<div><div>Checked</div><div>Checker</div></div>	<div><div>Drawn</div><div>Author</div></div>		<div><div>349 of 512</div></div>
Revisions:		Date:									

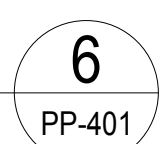
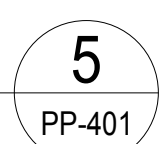
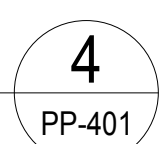
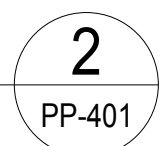


10.0264



1
PP-302

[illegible]





CONSULTANTS:

KEY PLAN

ARCHITECT/ENGINEERS:



Approved: Project Director

Project Number
E03CA2202

PP-402

 Department of Psychiatry



CONSULTANTS:	
CIVIL:	SLATER HANIFAN GROUP, 5740 S. ARVILLE ST. #216, LAS VEGAS, NV 89118
LANDSCAPE:	J W ZUNINO LANDSCAPE ARCHITECTURE, 3191 S. JONES BLVD., LAS VEGAS, NV 89146
MEP:	TEA CONSULTING ENGINEERING, 5155 WEST PATRICK LANE, LAS VEGAS, NV 89118
STRUCTURAL:	DEGENKOLB ENGINEERING, 235 MONTGOMERY STREET, SUITE 500, SAN FRANCISCO CA 94104
GEOTECHNICAL:	NINYO AND MOORE, 6700 PARADISE ROAD, SUITE E, LAS VEGAS, NV 89119
FIRE & LIFE SAFETY:	LASALLE ENGINEERING, 1000 YORK ROAD, WILLOW GROVE, PA 19090

RTKL
JMA ARCHITECTURE **STUDIOS**
A Joint Venture

Scale


Approved: Project Director

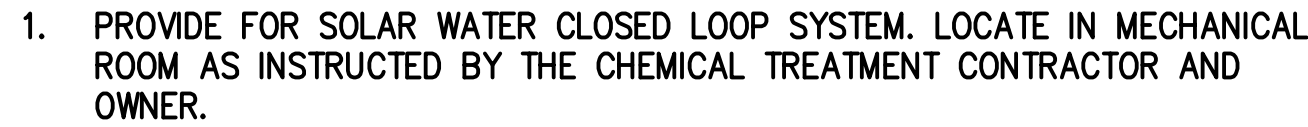
Milan Tršić

Location North Las Vegas, NV		
Date June 15, 2012	Checked MTD	Drawn MAD

Drawing Number
PP-403
356 of 512

**Office of
Construction
and
Facilities
Management**

 **Department of
Veterans Affairs**



NO SCALE



NO SCALE



NO SCALE

 Department of
Veterans Affairs

10.0264

three inches = one foot

one and one half inches = one foot

one inch = one foot

three quarters inch = one foot

3,
1,
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3,	-
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- 75%

60 SERVICE PRESSURE - (19.35 (SH) + 35 REQ. PRESSURE +

$$\text{TOTAL EQUIVALENT LENGTH (TEL)} = 300 \text{ FEET}$$

$$\text{WABLE FRICTION LOSS/100FT} = \frac{100 \times 5.65 \text{ PSI (PA)}}{300 \text{ FT (TEL)}} = 1.9 \text{ PSI}$$

1	1	–
3	3	–
7	7	–
16	16	–
26	26	5
66	66	35
205	–	90
380	–	245
–	–	–

CLIMBING FIXTURES

INAL (P-207): WALL MOUNTED, 0.125 GPF, FLUSH VALVE, WHITE VITREOUS CHINA, TOP
UD, BLOW-OUT. LOW CONSUMPTION, TOP SPUD, 0.125 GPF, EXPOSED, BATTERY POWERED,
NSOR OPERATED FLUSH VALVE. (ADA COMPLIANT)

LAVATORY (P-421): WALL MOUNTED, WITH VITREOUS CHINA, 4" CENTERS, 21-1/4" x 11-1/8" LAVATORY WITH OVERFLOW AND HANGER, 4" CENTERED 0.5 GPM, CHROME PLATED, ELECTRICALLY POWERED, SENSOR OPERATED LAVATORY FAUCET WITH CHROME PLATED GRID DRAIN. (ADA COMPLIANT).

CHEN SINK (P-524): COUNTERTOP MOUNTED, TYPE 304 STAINLESS STEEL, 3-HOLES, 4" CENTER-TO-CENTER, 33" X 22" X 5/2" DEEP, DOUBLE COMPARTMENT SINK. (1) CENTERSET, CHROME PLATED, 2.2 GPM, 6" SWING FAUCET WITH 4" BLADE HANDLES. (2) TYPE 316 STAINLESS STEEL, BASKET STRAINER WITH METAL STEM AND RUBBER STOPPER. RUGGED GALVANIZED STEEL CONSTRUCTION GARBAGE DISPOSAL WITH DISHWASHER CONNECTION, 3/4 HORSEPOWER, 115 VOLT, SINGLE PHASE, 1725 RPM, 8.1 AMP AVERAGE LOAD WITH ON/OFF CONTROL WALL SWITCH. (ADA COMPLIANT)

ELECTRIC WATER COOLER (P-610): ELECTRIC BI-LEVEL WATER COOLER/BOTTLE FILLING STATION, VANDAL RESISTANT BUBBLER, 1GPM FILL RATE, 8.0 GPH CAPACITY @ 90°F ROOM TEMP. WITH 115 V/1Ø COMPRESSOR. FURNISH WITH STOPS & TRAPS SAME AS LAVATORY.

APPLIES, TRAPS AND MISCELLANEOUS

APPLIES: FOR CONCEALED APPLICATIONS, CONNECT WATER CLOSETS, LAVATORIES AND SINKS WITH BALL VALVE ANGLE STOP WITH SS-16 16" STAINLESS STEEL CONNECTOR FOR WATER CLOSERS, SINKS; BALL VALVE ANGLE STOP WITH 12" STAINLESS STEEL CONNECTOR FOR WATER CLOSET. WHEN EXPOSED, PROVIDE CHROME PLATED FLEXIBLE TUBE--RISERS (PROVIDE FSET TAILPIECE AND INSULATE WASTE AND SUPPLIES AT ALL HANDICAPPED LAVATORIES REQUIRED.)

APS: CHROME PLATED CAST BRASS WITH CLEANOUT PLUG AND TUBING OUTLET WITH
AP ADAPTER AND ESCUTCHEON. PROVIDE OFFSET TAILPIECE AS REQUIRED.

TOILET DRAIN (FD): CAST IRON DRAIN BODY WITH FLASHING COLLAR AND ADJUSTABLE DRAINER HEAD. STRAINER FINISH SHALL BE NICKEL BRONZE UNLESS LOCATION REQUIRES FINISH TO MATCH APPLICABLE FIXTURE FINISHES AS IN TOILET ROOMS OR OUTDOOR LOCATIONS. 11-1/2" CAST IRON GRATE (MECHANICAL ROOM, AND HEAVY TRAFFIC AREAS). SEE SPECIFICATION SECTION 22 13 00 FOR ADDITIONAL INFORMATION.

OF DRAIN (RD): CAST IRON BODY AND DOME WITH FLASHING COLLAR AND DOUBLE UNDER
CK CLAMP.

ERFLOW ROOF DRAIN (ORD): CAST IRON BODY AND DOME WITH FLASHING COLLAR AND
UBLE UNDER DECK CLAMP.

MAKER BOX (IMB): STAINLESS STEEL, 1/2" x 1/4" COMPRESSION ANGLE STOP. FURNISH
TH 3'-0" OF 1/4" COILED TUBING.

GLE STOP ARRESTOR (ASA): MINI-ANGLE STOP ARRESTOR, 3/8" COMPRESSION, CHROME PLATED.

10.0264

one eighth inch = one foot

ITEM	MANUFACTURER / MODEL NUMBER	TYPE	APPLICATION	VOLUME (GALLONS)	LOCATION	PRECHARGE (PSIG)	MAXIMUM OPERATING WEIGHT (LBS)	NOTES
DET 1	—	BLADDER	DOMESTIC HOT WATER SYSTEM	106	MECHANICAL BASEMENT	45	1400	1, 2, 3
DET 2	—	BLADDER	SOLAR HOT WATER SYSTEM	10	MECHANICAL BASEMENT	45	150	1, 2, 3
DET 3	—	BLADDER	DOMESTIC COLD WATER SYSTEM	106	MECHANICAL BASEMENT	45	1400	1, 2, 3

1. PROVIDE WITH BOTTOM NPT STAINLESS STEEL SYSTEM CONNECTION AND 0.302" – 32 CHARGING VALVE CONNECTION.

2. ASME STAMPED FOR 125 PSIG WATER PRESSURE, PRE-CHARGED, HEAVY DUTY, FDA APPROVED, REPLACEMENT BUTYL BLADDER AND EPOXY LINED CONNECTIONS.

3. MOUNT ON 4" HOUSEKEEPING PAD.

ITEM	TYPE	LOCATION	FLOW (GPM)	TDH (FEET)	ELECTRICAL			NOTES
					VOLTS/PHASE	HP	RPM	
	VERTICAL MULTISTAGE HOT WATER CIRCULATING PUMP	MECHANICAL BASEMENT	34	60	460/3	3	1750	1, 6, 8
	DUPLEX SUBMERSIBLE SUMP PUMP (TWO PUMPS TOTAL) 	 ELEVATOR SUMP PIT	50 (EACH)	32 (EACH)	115/1	1/2 (EACH)	3450	4, 5, 6, 7
	DUPLEX SUBMERSIBLE SUMP PUMP (TWO PUMPS TOTAL)	EXTERIOR STAIR WELL	10 (EACH)	20 (EACH)	115/1	1/2 (EACH)	-	4, 5, 6, 7
	DUPLEX SUBMERSIBLE SUMP PUMP (TWO PUMPS TOTAL)	MECHANICAL BASEMENT	20 (EACH)	34 (EACH)	460/3	1 (EACH)	1750	2, 4, 6, 7
	INLINE SOLAR LOOP PUMP (SOLAR WATER)	MECHANICAL BASEMENT	5	45	115/1	1/2	3500	 1, 6, 8, 9
	INLINE SOLAR LOOP PUMP (DOMESTIC WATER)	MECHANICAL BASEMENT	15	25	460/3	1	1750	 1, 6, 8, 9

- PROVIDE WITH STAINLESS STEEL OR BRONZE CONSTRUCTION, SUITABLE FOR USE IN DOMESTIC WATER SYSTEMS AND FLANGED BRONZE HOUSING
- PROVIDE WITH CONTROL PANEL COMPLETE WITH HIGH LEVEL ALARM LIGHT, HORN, EXERCISE CIRCUIT, NON CLOG IMPELLER, PLUG IN CORD CONNECTION, AND NEMA 4X ENCLOSURE.
-  - NOT USED 
- PROVIDE WITH FLOAT SWITCH LEVEL CONTROL.
- PROVIDE WITH CONTROL PANEL COMPLETE WITH HIGH LEVEL ALARM LIGHT, HORN, EXERCISE CIRCUIT, PLUG IN CORD CONNECTION, AND NEMA 4X ENCLOSURE.

- PROVIDE WITH AUXILIARY DRY CONTACTS FOR DDC INTERFACE.
- WIRING SHALL BE IDENTIFIED FOR USE IN WET LOCATIONS IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE.
- PROVIDE SUPPLEMENTAL SUPPORT STEEL AND VIBRATION ISOLATION.
- PROVIDE A COMPLETE SOLAR WATER HEATING SYSTEM FROM A SINGLE VENDOR FOR COMPLETE SYSTEM OPERATION AND CONTROL, INCLUDING VARIABLE SPEED PUMPING FOR SOLAR LOOP PUMPS. COORDINATE WITH SOLAR COLLECTOR SCHEDULE, STORAGE TANK SCHEDULE, AND SHEET  PP-601 FOR ADDITIONAL INFORMATION.

WATER METER SCHEDULE													
ITEM	MANUFACTURER / MODEL NUMBER	TYPE	LOCATION	SERVICE	METER SIZE (INCHES)	MAXIMUM PRESSURE DROP (PSIG)	MAXIMUM OPERATING PRESSURE (PSIG)	MINIMUM FLOW RATE (GPM)	TYPICAL OPERATING RANGE (GPM)	MAXIMUM CONTINUOUS OPERATING RANGE (GPM)	TEMPERATURE RANGE (°F)	MAXIMUM OPERATING WEIGHT (LBS)	NOTES
	— —	INLINE	BASEMENT	DOMESTIC COLD WATER	3	7	150	20	20 – 250	400	33 – 100	270	1, 2, 3
1. PROVIDE WITH ENCODER REGISTER INTERCONNECTED TO THE DDC SYSTEM. PRIOR TO PURCHASE, CONTRACTOR SHALL VERIFY COMPATIBILITY WITH DDC SYSTEM.							3. METER AND COMPONENTS SHALL BE BAGNET COMPATIBLE.						
2. FURNISH WITH INTERNAL STRAINERS, CLASS 150 FLANGES, BRONZE MAIN CASE AND INTERNAL BY-PASS SECTION FOR LOW FLOW.							4. REFER TO DETAIL 3/PP-403 FOR INSTALLATION.						

SOLAR WATER HEATING PANEL SCHEDULE															
ITEM	TYPE	LOCATION	SERVICE	GROSS AREA (SQ FT)	NET APERTURE AREA (SQ FT)	MAXIMUM TEST PRESSURE (PSIG)	FLUID CAPACITY (GALLONS)	SRCC COLLECTOR PERFORMANCE PER PANEL PER DAY				EFFICIENCY EQUATION VALUES		MAXIMUM OPERATING WEIGHT (LBS)	NOTES
								Ti-Td (°F)	CLEAR DAY	MILDLY CLOUDY	CLOUDY DAY	Y INTERCEPT	SLOPE		
SLP 1	GLAZED FLAT PLATE	ADMIN ROOF	SOLAR WATER HEATING	108.71	97.95	160	2.4	36	109.3 MBH	75.5 MBH	41.8 MBH	0.738	-0.722 BTU/(HR·SQ FT·°F)	550	1, 2, 3
<p>1. SRCC OG-100 CERTIFIED GLAZED FLAT PLATE SOLAR WATER HEATING COLLECTOR. PROVIDE WITH COPPER TUBING AND ALUMINUM SHEET AND FRAME CONSTRUCTION WITH LOW IRON TEMPERED GLASS.</p> <p>2. FOR CLEAR DAYS USE 2000 BTU/SQ FT·°DAY, FOR MILDLY CLOUDY USE 1500 BTU/SQ FT·°DAY, AND FOR CLOUDY USE 1000 BTU/SQ FT·°DAY FOR COLLECTOR THERMAL PERFORMANCE RATING.</p> <p>3. PROVIDE A COMPLETE SOLAR WATER HEATING SYSTEM FROM A SINGLE VENDOR FOR COMPLETE SYSTEM OPERATION AND CONTROL. INCLUDING A SOLAR PUMP STATION AND DIFFERENTIAL CONTROL UNIT WITH TEMPERATURE SENSORS FOR INTERFACE WITH THE EXISTING BUILDING MANAGEMENT SYSTEM AND REQUIRED ACCESSORIES THAT ARE MATCHED FOR THE SCHEDULED SOLAR COLLECTORS. COORDINATE WITH PUMP SHCP-1 TO MATCH THE SOLAR COLLECTOR FLOW RATE AND SHCP-2 TO MATCH THE HEAT EXCHANGER FLOW RATE WITHIN ST-1. ENSURE ALL ITEMS OF THE SYSTEM (STORAGE TANK ST-1, SOLAR LOOP PUMPS SHCP-1 AND SHCP-2, SOLAR COLLECTOR SLP-1 ARE PIPED AND PROVIDED WITH ACCESSORIES AS RECOMMENDED BY THE SOLAR WATER HEATING SYSTEM MANUFACTURER. SEE SHEET PP-601 FOR PIPING DIAGRAM.</p>															

ITEM	MANUFACTURER MODEL NUMBER	LOCATION	TYPE	MOUNTING	MINIMUM MOUNTING HEIGHT (INCHES)	NUMBER OF DRAINS	INLET SIZE (INCHES)	MINIMUM HEADER CONNECTIONS	ELECTRICAL		NOTES
									V/PH	FUSE (AMPS)	
	—	BASEMENT MECHANICAL ROOM	ELECTRIC	WALL	12	4–30	3/4"		115V/1	2	1, 2, 3, 4, 5
	—	IH145 HAC	ELECTRIC	WALL	12	4–30	3/4"	4	115V/1	2	1, 2, 3, 4, 5
	—	1H108 HAC	ELECTRIC	WALL	12	4–30	3/4"		115V/1	2	1, 2, 3, 4, 5
	—	2H208 HAC	ELECTRIC	WALL	12	4–30	3/4"	4	115V/1	2	1, 2, 3, 4, 5
	—	3H308 HAC	ELECTRIC	WALL	12	4–30	3/4"	4	115V/1	2	1, 2, 3, 4, 5
	—	3H308 HAC	ELECTRIC	WALL	12	4–30	3/4"	4	115V/1	2	1, 2, 3, 4, 5
	—	3H308 HAC	ELECTRIC	WALL	12	4–30	3/4"	4	115V/1	2	1, 2, 3, 4, 5
	—	3H308 HAC	ELECTRIC	WALL	12	4–30	3/4"		115V/1	2	1, 2, 3, 4, 5
	—	3H308 HAC	ELECTRIC	WALL	12	4–30	3/4"	4	115V/1	2	1, 2, 3, 4, 5

1. PROVIDE WITH ANTI-SIPHON VACUUM BREAKER, 24 HOUR CLOCK, MANUAL OVER RIDE, SOLENOID VALVE, CALIBRATED MANIFOLD WITH 1/2" OUTLET COMPRESSION FITTINGS. VERIFY REQUIRED NUMBER OF OUTLETS WITH SPECIFIC LOCATION AND APPLICATION.
2. PROVIDE SHUT-OFF VALVE ON INLET.
3. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

4. PAINT ACCESS PANEL TO MATCH WALL. COORDINATE WITH ARCHITECT AND SPECIFICATIONS.
5. VERIFY MOUNTING HEIGHT WITH FIELD CONDITIONS AND MANUFACTURER'S RECOMMENDATIONS.

ITEM	MANUFACTURER / MODEL NUMBER	TYPE	CAPACITY (GALLONS)	LOCATION	SIZE L x W x H (INCHES)	MANHOLE SIZE (INCHES)	MANHOLE SPACING (FEET)	INLET / OUTLET SIZE (INCHES)	SAMPLE BOX			NOTES
									MANUFACTURER / MODEL NUMBER	SIZE (INCHES)	INLET / OUTLET SIZE (INCHES)	
SO 1	—	SAND/OIL INTERCEPTOR PRECAST CONCRETE	500	LANDSCAPE	72 x 48 x 70	24	10 MAX	4	PRECAST CONCRETE	24	3	1, 2, 3, 4

- PROVIDE INTERCEPTOR AND SAMPLE BOX WITH CAST IRON FRAMES AND GASKETED (GAS—TIGHT) COVERS.
- PROVIDE INTERCEPTOR AND SAMPLE BOX WITH RISERS AS REQUIRED TO MATCH SURROUNDING INLET/OUTLET CONNECTION.
- INTERCEPTOR AND SAMPLE BOX SHALL BE CONSTRUCTED FOR H—20 TRAFFIC LOADING.
- INTERCEPTOR AND SAMPLE BOX DESIGN SHALL BE FOR BURIAL NO DEEPER THAN 6'—0".

ITEM	MANUFACTURER MODEL NUMBER	TYPE	APPLICATION	VOLUME (GALLONS)	SIZE (HEIGHT x DIAMETER)	LOCATION	MAXIMUM OPERATING WEIGHT (LBS)	NOTES
	— —	VERTICAL	SOLAR BUFFER TANK	200	75 1/8" x 36 1/4"	MECHANICAL BASEMENT	2200	1, 2, 3, 4, 5
<div> <div> 1. ASME STAMPED FOR 150 PSIG WATER PRESSURE AND CONFORM WITH ASHRAE 90.1 LATEST EDITION. 2. MOUNT ON 4" HOUSEKEEPING PAD. 3. PROVIDE WITH GLASS LINING, MAGNESIUM ANODES, 2" FOAM INSULATION, GALVANIZED JACKET FINISHED IN ENAMEL MANWAY INSPECTURE PAINT AND DRAIN CONNECTIONS. 4. PROVIDE WITH SEISMIC RETAINING STRAP. </div> <div> 5. PROVIDE WITH DOUBLE WALL HEAT EXCHANGER WITHIN TANK. COORDINATE HEAT EXCHANGER REQUIREMENTS WITH THE SOLAR WATER HEATING PANEL MANUFACTURE AND SOLAR PUMP MANUFACTURER. PROVIDE A COMPLETE SOLAR WATER HEATING SYSTEM FROM A SINGLE VENDOR FOR COMPLETE SYSTEM OPERATION AND CONTROL. COORDINATE WITH SOLAR COLLECTOR SCHEDULE, PUMP SCHEDULE, AND SHEET P-601 FOR ADDITIONAL INFORMATION. </div> </div>								


10.0264

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LANDSCAPE:	JW ZUNINO LANDSCAPE ARCHITECTURE, 3191 S. JONES BLVD., LAS VEGAS, NV 89146
MEP:	JBA CONSULTING ENGINEERING, 5155 WEST PATRICK LANE, LAS VEGAS, NV 89118
STRUCTURAL:	DEGENKOLB ENGINEERING, 235 MONTGOMERY STREET, SUITE 500, SAN FRANCISCO CA 94104
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JMA ARCHITECTURE STUDIOS
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Veterans Affairs

BOOSTER PUMP SCHEDULE

ITEM	MANUFACTURER MODEL NUMBER	SYSTEM TYPE	LOCATION	FLOW (GPM)	SUCTION PRESSURE (PSIG)	DISCHARGE PRESSURE (PSIG)	QUANTITY (TOTAL)	PUMPS				ELECTRICAL (SYSTEM)		MAXIMUM OPERATING WEIGHT (LBS)	NOTES	
								FLOW (GPM)	TDH (PSI)	ELECTRICAL HP	RPM	VOLTS/ PHASE	MCA			MOCp
	—	PACKAGED VERTICAL MULTI-STAGE	MECHANICAL BASEMENT	105	40	80	3	70 (2) 35 (1)	40 (EACH)	5 (2) 5 (1)	3,450 (EACH)	460/3	—	—	—	1, 2, 3, 4, 5, 6, 7, 8, 9
1.	MANUFACTURER SHALL ACCOUNT FOR INTERNAL SYSTEM LOSSES IN FINAL PUMP SELECTIONS.							6. EACH PUMP SHALL BE VERTICAL MULTISTAGE DESIGN, FURNISHED WITH INDIVIDUAL VARIABLE FREQUENCY DRIVES, ISOLATION VALVES ON PUMP INLET/OUTLET AND CHECK VALVE ON OUTLET OF EACH PUMP.								
2.	PROVIDE WITH AN 80 GALLON ACCEPTANCE VOLUME. HYDRO-PNEUMATIC TANK ASME STAMPED FOR 125 PSIG WATER PRESSURE, PRE-CHARGED, HEAVY DUTY, FDA APPROVED, BUTYL BLADDER AND EPOXY LINED CONNECTIONS.							7. PROVIDE ISOLATORS — SEE VIBRATION ISOLATION SCHEDULE.								
3.	PROVIDE WITH FACTORY MOUNTED CONTROLLER, PANEL ILLUMINATION LIGHTS, PUMP RUN LIGHTS, PUMP FAULT LIGHTS, SINGLE POINT POWER CONNECTION AND DISCONNECT SWITCH.							8. SYSTEM CONFIGURATION SHALL BE: 67% — 67% — 33%								
4.	PROVIDE WITH FULL SIZE STAINLESS STEEL MANIFOLD.							9. PROVIDE WITH ALARM/STATUS OUTPUT TO BMS/DC CONTROL SYSTEM.								
5.	MOUNT ON 4" HOUSE KEEPING PAD.															

TEMPERING STATION SCHEDULE

ITEM	LOCATION	MANUFACTURER MODEL NUMBER	THERMOSTATIC VALVE	MIXING	FLOW RATE (GPM)	SYSTEM PRESSURE DROP (PSIG)	RECIRCULATING PUMP					NOTES
							FLOW RATE (GPM)	TDH (FT)	INLET/OUTLET SIZE (IN)	ELECTRICAL		
										V/PH	HP	
TS-1	BASEMENT MECHANICAL RM	—	HIGH/LOW		34	3	—	—	—	—	—	1

1. PROVIDE COMPLETE WITH VALVES, GAUGES, THERMOSTATS, AND GALVANIZED STEEL SUPPORT.
INCLUDE OPTION FOR LEGS TO FLOOR.

**CONSTRUCTION DOCUMENTS
BUILDING IS FULLY SPRINKLERED**

ADDENDUM 1	08/15/12	<div>CONSULTANTS:</div> <div>CIVIL: SLATER HANIFAN GROUP, 5740 S. ARVILLE ST. #216, LAS VEGAS, NV 89118</div> <div>LANDSCAPE: J W ZUNINO LANDSCAPE ARCHITECTURE, 3191 S. JONES BLVD., LAS VEGAS, NV 89146</div> <div>MEP: JBA CONSULTING ENGINEERING, 5155 WEST PATRICK LANE, LAS VEGAS, NV 89118</div> <div>STRUCTURAL: DEGENKOLB ENGINEERING, 235 MONTGOMERY STREET, SUITE 500, SAN FRANCISCO CA 94104</div> <div>GEOTECHNICAL: NINYO AND MOORE, 6700 PARADISE ROAD, SUITE E, LAS VEGAS, NV 89119</div> <div>FIRE & LIFE SAFETY: LASALLE ENGINEERING, 1000 YORK ROAD, WILLOW GROVE, PA 19090</div>	<div>KEY PLAN</div>	<div>ARCHITECT/ENGINEERS:</div> <div><div><div>RTKL</div><div>JMA ARCHITECTURE</div></div><div><div>STUDIOS</div><div>A Joint Venture</div></div></div>	<div>Drawing Title</div> <div>Plumbing - Schedules</div>	<div>Project Title</div> <div>VA Medical Center - PHASE V, Administration Bldg. & Education Ctr. Addition</div>	<div>Project Number</div> <div>593CA2202</div>	<div>Office of Construction and Facilities Management</div> <div><div><div></div><div>Department of Veterans Affairs</div></div></div>	
					<div>Scale</div> <div>N.T.S.</div>	<div>Building Number</div> <div>6</div>			
					<div>Approved: Project Director</div> <div><div>Milan Arakic</div></div>	<div>Drawing Number</div> <div>PP-503</div>	<div>360 of 512</div>		
					<div>Location</div> <div>North Las Vegas, NV</div>	<div>Date</div> <div>June 15, 2012</div>	<div>Checked</div> <div>MTD</div>		<div>Drawn</div> <div>MAD</div>
Revisions:	Date:								

